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1-2-3 Evaluation and Design Guide to Wayfinding





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1-2-3 Evaluation and Design

Guide to Wayfinding

**Helping Visitors Find Their Way
Around Public Buildings**

Based on a consultant report

by

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with

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Preface

This document has been published in order to contribute the knowledge based on the emerging design fields of environmental communication and wayfinding. It is aimed at providing architects, designers and property managers with a tool to solve or prevent wayfinding problems in built settings.

The 1–2–3 Evaluation and Design Guide to Wayfinding is a guideline only. For the federal government, the requirements of the Federal Identity Program (FIP), as issued by the Treasury Board of Canada, must be met. This publication should be used to complement FIP specifications.

The contents of this publication reflect the views of the consultants and not necessarily the official views or opinions of Public Works Canada.

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Introduction to Wayfinding

A. Wayfinding, Environmental Communications, and Signage

Wayfinding refers to ways of getting around a building. In order to reach a destination, people must make decisions based on information that may be:

- verbal (notably the information desk);
- graphic (signs, symbols, directories, maps);
- architectural (entrances, stairs, elevators, corridors, doors, textures, sound); or
- spatial (how things relate spatially to each other).

The terms *environmental communication* and *wayfinding information* are used throughout this *The 1–2–3 Evaluation and Design Guide to Wayfinding* to replace the more common term *signage*. While signage is an aspect of environmental communications, the use of the term is misleading since information used for wayfinding in the built environment consists of more than just signs. There is no guarantee that signage alone will lead to a destination. Other alternatives must often be sought.

For example, the commissionaire at an information desk is a vital source of information or environmental communication. So is the building and its layout. Stairs or elevators, if they are visible or obvious, for example, communicate the way to other levels in the building without any signage at all. Environmental communications can also include visual aids such as graphics, maps, directories, symbols, letters, and spoken messages.

This *Guide* does not make the assumption that wayfinding problems actually exist in your building. If people have few problems reaching their

destinations, there may be no need to alter your communications or wayfinding information at all.

If this is the case in your building, it is still a good idea to familiarize yourself with the concepts in this *Guide*. Remember, building populations and activities are not static; over time, tenants change, departments expand and contract, and temporary offices are opened. Wayfinding information must keep pace. There is always the danger of altering a sign to meet a changed need but forgetting to advise the information desk or change the directory and map. When such lapses occur, wayfinding problems will creep in and you may find yourself wondering why people are suddenly getting lost.

This is where this *Guide* can help you to:

- identify wayfinding problems;
- understand why people are having such problems; and
- learn how to correct them.

You may be pleasantly surprised to discover just how easily and inexpensively some of these problems can be fixed.

B. How to Spot the Problem Areas

Recognizing problem areas must be approached with an open mind. If you can help it, avoid going at it with any preconceptions.

If people are getting lost, it is not because they want to. The cause must be examined. Is it their decision-making process, which is an essential ingredient of wayfinding, or is the building lacking direction?

This *Guide* will help you find out.

What you are asked to do is to discover the problems people are experiencing, and why. Everyone has their own method of doing this, but here are some useful tips.

C. Things To Look For and Questions to Ask

- Talk to receptionists in the various tenant departments (or to the departmental representative). Ask what the three most-asked questions are in the course of an average day. The chances are that wayfinding questions will rank high.
- When talking to the receptionist, ask whether people have turned up by mistake at their office while looking for another office.
- If there is a main floor information desk, get feedback on the current wayfinding situation in the building. Being exposed to people coming and going, the commissionaire will have a good idea about their problems and complaints. Suggest that he/she keep a log (see Part 2). Look at this log once a week. It may tell you a lot.
- Periodically follow visitors around noting where they hesitate and start looking for someone from whom they can ask directions. If this happens frequently at a specific intersection or location, there must be a communication problem here. What is it? (See Part 2 for the kinds of questions to ask.)
- Look for illegal, hand-written signs posted around your building. Before removing them, try to find out whether they fulfil a legitimate need and whether it should be incorporated into a proper sign.
- Look for obsolete signs. Those that once meant something, but no longer do, should come down immediately.
- Look for signs that may not be obsolete, but have through various changes (decor, lighting, plants, etc.) become obscured.
- Meet with the Building Tenants Committee and ask if their clients have complained about wayfinding problems and whether they have any ideas about solving them. Part 2 describes some of the issues you may wish to discuss with the Committee.

These initiatives will help to identify the more common wayfinding and circulation problems that may exist in your building. They are, however, only half of what you need to know. The other half has to do with understanding why these problems exist.

D. Problems with Signs

It was stated that people need adequate information to make the right decisions to reach their destination. This means:

- all the right information;
- at all the places where decisions must be made; and
- in the right form so that the information can be understood.

If one of these three elements is missing, visitors may have problems with the information being supplied in the building.

On the other hand, if all three elements are evident, but glare makes signs illegible or they have been carelessly displayed, (e.g. too high/low, etc.) people may have difficulty in finding or reading them.

People with normal sight will experience problems under these circumstances, however, those with low vision will find it more than a problem. It will be an impossible situation. This represents another reason for people to give up on signs, and to go instead to the nearest office to ask for directions.

The experience of sign specialists suggests that consistent and reliable display of information should be high among your priorities (see Part 3.A). The good news is that this problem can be easily and inexpensively fixed, even on a temporary basis.

Another problem evident with signs is that sometimes they can be seen, but cannot be understood. This could be for one of several reasons: the letters may be too small, in which case the sign is illegible, or the sign is legible but the message is so ambiguous that the viewer cannot understand it, in which case the sign is unreadable.

There is still another reason why a person may have a problem with the signs in a building—even when they are both highly legible and highly readable. The person may be literacy-impaired. This introduces another important aspect of environmental communication that needs understanding.

E. Additional Problems of the Disabled Visitor

Much has been done in recent years to help disabled people, particularly in trying to create barrier-free architectural spaces. Much remains to be done, however, to assist the invisibly disabled whose handicaps are not necessarily apparent. This reference is made for those who are sight- or hearing-impaired, or who have other perceptual impairments.

As a means of focusing attention on the fact that everyone is not able bodied and that many people have special communication needs, consider the following:

- Sight-impaired persons have poor eyesight that can manifest itself in many ways—from being colour blind to having no useful vision whatsoever. A common and much overlooked form of visual impairment is “low vision”, a category in which some 1 per cent (including the totally blind) of all Canadians fall. Low vision people with some useful vision can see signs but must be able to get close to them. Even then, the signs must be in large

letters and have excellent contrast between the letters and the background.

- Hearing-impaired persons represent as much as 10 per cent (including .02 per cent totally deaf) of our population. Although this group has no problems with reading signs, if they do not understand them or if they become lost, they may well be too shy to ask questions. Many hearing-impaired persons also cannot hear a fire alarm.
- Literacy-impaired persons constitute up to 20 to 25 per cent of our adult population. Even if a sign is perfectly legible because of the size of the letters this group may not be able to read it.
- Speech-impaired persons account for approximately .05 per cent of Canadians. Their trouble in asking questions will often result in difficulty in getting much-needed information.
- Developmentally-impaired persons experience other difficulties with environmental communication that are not directly connected with vision, hearing, literacy, or speech problems. This large group of persons comprises a wide variety of disorders. Estimates of learning-disabled persons run as high as 10 per cent of our population, while those of mentally-impaired persons is 4 per cent.
- Situationally-impaired persons are those who would, under other circumstances be described as “unimpaired”. Due to a stressful situation they may be apprehensive or angry at having to be in the building at all, and become situationally-impaired. The visitor will consequently experience difficulty with signs, no matter how good they are. For obvious reasons, there is no data on the situationally-impaired, however, it is fair to say that all of us will be, or have been, in this situation at one time or another.

- Mobility-impaired persons, either those in wheelchairs or those with ambulatory problems, comprise our last group. Because of age, illness or accident, they may have difficulty in walking and may be concerned about going any distance to read a sign. They will also want reinforcement or confirmation that once they set out to a destination, they are in fact going in the right direction.

All these needs should be recognized and considered when seeking ways of providing wayfinding information in public buildings.

F. Problems with Unfamiliar Buildings

If you discover that people are getting lost or are not finding it easy to get to their destinations, this may be because of the way the building is designed, or the way in which the departments and/or services are distributed within the building. The location of the various sections of a department or service on several different floors may make sense to Managers, but it is likely to result in a real headache for the visitor.

There may be some things that can be done to consolidate these services better and thereby solve the problem without adding a single sign. You may even be able to eliminate a lot of them. On the other hand, if nothing can be done, then redesigning or increasing the number of the signs may be the answer.

People are called creatures of habit for a reason. They are used to things being in a familiar form or place. When they are, they rarely experience problems. When they are not, people may have problems because the situation is unfamiliar. This can be easily demonstrated by placing an elevator out of sight on the mezzanine level. There is nothing that can be done about such architectural oddities, but you can compensate with ingenuity and common sense by providing adequate information. Don't immediately think of signs as the only answer. As

a matter of fact, in such cases, you should think of signs last.

When going through this *Guide*, you will be surprised how many different ways are at your disposal for communicating wayfinding information. Sometimes, and particularly when rerouting people, a judiciously-placed planter or a different floor covering will be effective. Use the building environment and its components as a communication device when you can. When you can't, use a sign.

G. The 1-2-3 Approach

We urge you to follow the 1-2-3 approach to avoid doing things you don't fully understand. Each of the three parts of this *Guide* introduces you to a new understanding of wayfinding problems and how to correct or avoid them.

- Part 1 alerts you to some of the more important principles of evaluating your building, and defines what useful visitor information actually is. The information in Part 1 is general, and will prepare you for the specifics on which you will be gathering data in Part 2.
- Part 2 guides you through data gathering activities. Remember when completing this section, that signs are just one aspect of how your building environment communicates to its visitors.
- Part 3 comprises two approaches to solving your problems once they have been identified. There is a temporary, inexpensive solution and a longer-term, permanent, and more costly solution. Don't, however, be misled about permanency. In environmental communication, this is a relative term because of the dynamics of the environment itself. Again, remember as you go through this final section that not all solutions, temporary or permanent, are achievable exclusively with signs.
- The Appendices contain definitions of terms used in the *Guide* that may be unfamiliar to you. They also contain design intent drawings, diagrams that illustrate the text, and other useful information.

1. Other Things You Need to Know

1.A Why Environmental Communication Is Important for Wayfinding

As you evaluate your building's environmental information, it is helpful and interesting to have some background knowledge on why wayfinding information should be presented in certain ways.

An environmental information system designed for wayfinding is based on two fundamental aspects in understanding buildings. One is called spatial; the other is called sequential.

Spatial refers to the total dimensions of your building; its walls enclose space while elements such as escalators, elevators, interior atriums etc., help break up the space. People notice and remember these objects as they move about a building.

The building's organization principle, another component of spatial information, describes the architectural layout of the building. This arrangement may be in the form of a square, a rectangle, a "U", a "Y", a cross, etc. To be useful as wayfinding information, the organization principle must be visible from the outside, expressed in the shape of the walls, and from the inside, when entering the building. If your building does not display this information it cannot be changed, however, the organization principle can be communicated by using a building map.

The combination of elements and organization principles helps a visitor create an image. This notion of imagery is extremely important in wayfinding.

In contrast to spatial understanding of buildings, we also have a sequential understanding. This can be compared to considering a building in terms of its destination routes. When we travel the routes, we require environmental information. In buildings, these routes are formed by vertical and horizontal circulation (corridors, elevators, stairs, etc.). Routes in buildings require, among other information, signs. For successful wayfinding, signs have to be presented in a particular way. This has to do with how we assimilate information when we are finding our way around.

We do not all have good vision, yet environmental communication is almost entirely based on the assumption that it will be read with normal vision. It is only now that we are beginning to respond to the needs of those who rely on touch and sound, i.e., the visually-impaired. The sound of elevators, for example, is information for people who can't see; a large entrance hall may also contain sounds that, for people who are alert to it, indicate how large the space is that they have to traverse.

People with visual difficulties need sequential and spatial wayfinding information. You can help them, if, in the long-term planning aspect of solutions to wayfinding problems, you include retrofitting entrances with a textured path to the information desk. Once you have created this path, you should also think about incorporating descriptions about the building's spatial features into the verbal information that is given out by the desk attendants.

With this information, you are better positioned to understand why you should re-think your wayfinding information system. To help even more, try to observe yourself as a wayfinder the next time you visit a building.

1.B Understanding Your Building's Wayfinding Components

A building can be looked at as simply a collection of facilities, functions, and modes of transportation. In this sense, it is much like a miniature town or city, except that the streets are piled one on top of the other.

Such a view of a building may be practical in terms of mail delivery, maintenance or leasing, but from a wayfinding information standpoint, a building should be looked at quite differently. From another perspective, a building can be seen as being made up of five interdependent elements or components:

- destinations;
- destination zones;
- routes;
- decision points; and
- reference points.

This matter will be discussed in greater detail in Part 3. At this point, however, it is important to familiarize yourself with the basics of these five concepts.

1.B.1 Destinations

These are the individual tenants, facilities, and services located in a building that people want to visit. Individual offices are destinations. So are the post offices, smoke shops, washrooms, and elevators. The information desk is also a destination.

1.B.2 Destination Zones

Destination zones are larger groupings of tenants who provide similar services that are clustered in one location. For example, doctors' offices are sometimes clustered together to form a medical centre in a large office tower. The retail area of a large mixed-use complex is another example of a destination zone.

It is desirable, but not always feasible in public buildings, to have departmental offices providing common or similar services clustered together in a destination zone. Wayfinding is enhanced whenever this occurs. Wayfinding is hampered when common services are distributed randomly about the building in several separate locations.

1.B.3 Routes

Routes are the ways taken by persons to arrive at their destination or destination zone. Depending upon the building's design, there may be many routes to any given destination. Some are more practical than others. Furthermore, a route to be taken by a person in a wheelchair may differ from that which will be followed by others.

Before doing anything to improve wayfinding in your building, consider which routes to specific destinations are the simplest and easiest for all individuals. This will be the basis for your building and directional signing and other wayfinding improvements.

1.B.4 Decision Points

Decision points are spots or areas where people need, and expect to find information. Typical examples of decision points are elevator interiors, lobbies, and corridor intersections. Before proceeding through intersections, people must know in what direction left, right, or straight ahead, their destination lies. Fewer decision points on any route to a destination will result in easier and quicker wayfinding.

1.B.5 Reference Points

Reference points are anything that people use to get their bearings in a strange environment. Visitors to a strange city will use dominant geographic or architectural features as reference points.

A building's features will help visitors to understand where they are in a given setting, and to remember the route they have taken. Examples of reference points include indoor gardens, dec-

orative elements or views to the outside allowing familiar objects to be seen. Information desk attendants can use reference points to give instructions to visitors, for example, “Down the hall to the drinking fountain, then take the second door on the left.”

You can help visitors use important reference points in your building by highlighting them with paint, clusters of planters, and in other ways.

1.C Useful Visitor Information

1.C.1 Choosing the Right Words

Useful visitor information begins with conveying the right messages. Useful information is about the messages that go into new signs and about those contained in existing signs. It is important to choose words that best convey wayfinding information.

It is also important to understand what visitors are looking for when they go to a particular department or office. Clear messages should be displayed to assist them in reaching their destination. For example, “Passport Information” will be more meaningful to a visitor than “External Affairs Canada”, though both labels may be correct.

The blue pages at the end of the phone book do this very well. They are an excellent guide for you to follow in developing useful messages for signs to much-visited departments in your building.

These departments must also be properly identified by name. These should be displayed on building directories and on floor directories in elevator lobbies, if applicable. There is, however, a strong argument for listing their plain language functions as well.

All building directories should be organized to allow quick access by the visitors by using plain

language functional names. Make certain also that if the visitor is provided with directions to “Passport Information” they don’t find just “External Affairs Canada” on the door when they get there! Continuity is critical.

Another important point concerns how this information is displayed. People have great difficulty handling large blocks of copy on signs and directories. Often a building may have a number of tenants making the directory hard to read.

Under such circumstances, it is important to arrange the display of information in “bundles” of no more than five lines of information at a time. A space should break the list before it continues.

The building directory should be organized alphabetically by tower, or wing. If there is more than one of these to a building complex, proceed as follows:

- provide complete information about tenants, including room numbers (destinations) and the tower/wing in which the directory is located; and
- alongside, provide information listing tenants in other towers/wings, without room numbers.

1.C.2 Using Reference Points

Many people have trouble with signs containing arrows. Those pointing left and right are more effective than those pointing up or down. Wayfinding devices that rely on signs with arrows for direction always involve locating a sign at each and every decision point along the route to the final destination. This can result in the display of too many signs leading to an overload of information.

Consider, instead, a different approach that makes use of reference points.

For example, a statement on the building directory saying,

- “Passport Office: take elevators to level 3, go right to drinking fountain, then go left to the planters”

will be more effective than trying to direct people with signs containing arrows.

A new version of these directions will have to be displayed on level 3, but this will substantially reduce the number of signs needed overall.

1.C.3 Distinguishing Between Information Types

To understand what wayfinding is all about, it is important to realize that everything a visitor could possibly want to know can be divided into three information types:

- general information about the building;
- direction to a given destination; and
- identification of that destination.

The obvious way to provide this information is through the display of signs. But as already learned, reference points in the building can serve to provide information just as well as signs.

It is important to think of signage and wayfinding in these terms since the solutions proposed in Part 3 of this *Guide* are arranged in these categories.

General Information About the Building

The most important general information sign is the building directory. This informs people of the tenants and where they can be found. Special features and amenities such as accessible washrooms, should also be highlighted on all directory boards.

Maps in the conventional sense, three-dimensional or otherwise, can provide orientation while giving visitors an idea of how complicated or simple the building may be. Maps may also

display the building's shape (e.g. H- T- L-shaped, etc), where the visitor is currently situated, and where their destinations lie.

Another useful device is a “spoken map” that briefly describes the building and where the visitor is inside it. Because some people have trouble reading and understanding maps, the option of a self-help telephone is an excellent substitute.

Visitors can also make use of reference points in the building to provide them with orientation.

Hours of service for the various facilities are another aspect of general information. If the building contains hazardous areas (e.g. Electrical Hazard), information about them falls into this category. Restrictions within the building, such as “No Smoking”, are also considered general information about the building.

Directions to Destinations

Conventional arrow signs, particularly those with arrows pointing up or down confuse people. Directional systems relying upon arrows tend to require many more signs than do plain language ones (e.g. Go to the end of the corridor and turn left).

Self-help telephones with pre-programmed verbal instructions are also useful in guiding visitors to their destinations. Planters and other furnishings can also be effectively used to provide directions for visitors. A planter deflecting them from taking a wrong route to a destination, or a different floor covering or texture leading in the direction they should go, is an example of this. All of these aspects can be effective. They are also less unsightly than a free-standing sign whose obvious function is to correct an ambiguity in the building layout.

Identification of Destinations

Signs that tell visitors they have reached their destination should provide information identical to that displayed on the building directory. The easiest way to convey this is by using a sign beside the entrance to the department or office involved. Do not however overlook the poten-

tial of distinctive objects, planters, etc. to amplify the signs, particularly for identifying major destinations and zones. It is very helpful to be able to say “Your destination lies just beyond the big sculpture of a horse. Take the corridor to the left when you get to it.”

1.C.4 The Importance of Mounting Signs Consistently

Most problems experienced by visitors is the lack of consistency in how signs are placed on walls. They vary from being high up to be out of harm’s way, to being low. They are on doors, beside doors, or over doors. They may also be suspended from ceilings or be located on bulkheads. This is very confusing for first-time visitors, even if tenants soon get used to it. In Part 3 of this *Guide*, relocating signs according to the consistency principle will be shown as a next-to-no-cost improvement.

The principle developed for public buildings is to place all wall-mounted signs, including self-help telephones in an information band between 1300 mm and 1600 mm off the floor. This places all information at, or near to, eye level for most people, and is a satisfactory compromise for people in wheelchairs.

This information band is 300 mm deep while many signs are less than this in depth. The rule is to place the top of the sign at the 1600 mm level. Then if additions are required, they can be placed below this. There are certain excep-

tions to this rule, but most signs will be located within the information band.

If a sign exceeds the prescribed 300 mm maximum depth of the information band the information will be formed into columns, side by side, with no single column exceeding the 300 mm depth. The rule here is that left-pointing arrows and information are placed on the left, while right-pointing arrows and information are on the right.

The placing of signs at standardized mounting heights is related to where signs are located throughout the building.

1.C.5 The Importance of Locating Signs Consistently

Part 2, Section 2.D contains part of an annotated plan for an imaginary building—with the method for marking the locations where signs should go. This is the best method known for locating signs and is the only way to communicate this information to the tradesmen who will install them.

At the appropriate time, plans of the building should be reduced to normal bond paper sizes that can be reproduced on a copier. A simple set of architects’ drawings rather than complex construction drawings will provide the necessary information to help in this task. Later the matter of how the plans should be used to identify destinations and to plot the routes and decision points will be discussed.

2. Analysis of Wayfinding Problems

2.A Introduction

You have been introduced to the broad principles necessary for an understanding of the wayfinding problems that visitors have.

Now you can analyse your own building in terms of the problems your visitors may be experiencing, and evaluate the measures needed to cope with such problems.

In order to do this, you will have to gather data from three separate viewpoints:

- comment from tenants and building personnel;
- comments from visitors; and
- problem areas that you identify yourself.

When these tasks have been completed you will be in a better position to know:

- whether there are wayfinding information deficiencies in the building;
- what these deficiencies are; and
- what you can do to correct them.

2.B The Building Tenants Committee

2.B.1 The Value of a Meeting

The value of a meeting is two-fold. First, information about visitors' reactions to the wayfinding information system as it currently exists will be voiced. Tenants know best whether visitors are turning up lost at their offices while looking for somewhere else. They often get abuse as a result of visitors' frustrations.

Many tenants have likely experimented with their own versions of how signs should be with

respect to their own areas. Even though such illegal signs can be unsightly and unprofessional, they do represent genuine attempts in dealing with a situation that is perceived as being fixable.

Tenants are indeed knowledgeable. You must however, make them aware of the fact that signs are not the only wayfinding solution. In addition (and this is the second reason why a meeting will have value) any final solution is bound to disappoint some tenants. It will be beyond your capability to satisfy their demands because you would quickly run out of wall space to display all of the signs that they might want.

A meeting will help to get opinions out in the open. By taking tenants through a series of logical steps dealing with the essential issues involved in wayfinding, chances are good that you will achieve a consensus of sorts.

With what you have learned to date and with your concern for the whole building, you are in the best position to put forward logical arguments and to describe issues plainly.

The last thing that you need, once you have done your best to improve wayfinding in the building, is to have the tenants saying they could have done better—if only they had been consulted. Try to get a good turnout for the meeting and try to get the tenants to be represented by personnel who have had experience in dealing with visitors.

2.B.2 Some of the Major Issues for Discussion

In the Introduction it was illustrated that if people are going to find their way to their destination in a strange environment, they need information. Thus it follows that information should be accurate and appropriately placed in order for correct decisions to be made. This in turn will ensure that visitors reach their destination because of proper direction rather than luck.

There is a logical flow to the wayfinding process. It is definitely a process involving several interdependent aspects of getting about. The follow-

ing outlines some of the major issues. Take a set of large-scale plans to the meeting to be marked up as different issues and problems are discussed. Make a list of all the tenants in the building, organized by floor, and put an asterisk by those generating a lot of visitor traffic.

1. Where do people go?

- What are their main destinations?
- What are the less important ones?
- Where are the washrooms for public use situated?
- Are all of them (and all of the other destinations) accessible to disabled persons?
- Are the destinations grouped together in any meaningful way in zones, or not?
- What are the implications for wayfinding if a given high-traffic generator is on several different levels in the building? Or if it is not on the main floor?

Mark the main generators of visitor traffic on the plan in one colour and the less important ones in another colour. Use a third colour for the washrooms used by the public and for any other common-use facilities, including the information desk.

2. How do people get there?

- Are some destinations causing more problems than others?
- What is the routing to the major destinations that is indicated by the signage?
- Is this routing logical in that it involves a minimum number of decision points—or is it not logical because there are too many?
- Is the routing for persons in wheel-chairs the same as, or different from, that for others?

- Is the routing to the elevators/escalators from the main (and other) entrances obvious at a glance or not?

Mark the currently-used routes to the major generators of visitor traffic on the plans using different colours if necessary. Include wheel-chair routes.

Identify the decision points on each route by a mark such as a ● or a *. Count them. Encourage discussion of whether these routes are, in actual fact, the most appropriate. Identify by some means those decision points that the group feels are particularly difficult for visitors, both disabled and able bodied. (You will see the major significance of these decision points when, in the next section, you discuss the content of the signs at each of them).

3. What is the problem?

- Has the discussion so far pinpointed the problem as having to do with the fact that departmental services are fragmented throughout the building?
- Or has it identified the problem as being the routes as currently signed to these destinations?
- Or could the problem have to do with the signs themselves?

After these issues have been discussed examine the following:

Content

- Is the content (i.e.: the “copy” or the “messages”) accurate and complete?
- Is there information at every decision point to guide visitors to major destinations or zones?
- Is the directional information on signs and the building directory in the same plain language?
- Do the signs contain enough pictographs?
- Do people understand the pictographs?
- Are there any other comments on what the signs say?

Identify the decision points marked on the plans where the group felt that the information available to visitors may have been inaccurate or incomplete.

Size

- Are the letters on the signs big enough to be read from a distance by a person with normal and low vision?
- Has anyone noticed people with low vision having difficulty with the letter signs?
- Are the pictographs, if used, big enough?
- Are the signs sufficiently large to be noticed in the environment?

The capital letter height of messages should be 22 mm for identification signs and 40 mm minimum for directional signs. Pictographs should be at least 125 mm square.

Mounting

- Are the signs consistently placed on the walls?

The ideal mounting height for all signs is between 1300 mm and 1600 mm. This places the signs at eye level and ensures consistency.

Locations

- Is there adequate, and accurate, information at all of the decision points en route to all of the major destinations and zones?

Review on the plans whether there is, or is not, adequate and accurate information at each of the decision points en route to all of the destination zones and other major destinations including the public washrooms.

Form

- Does anyone have any suggestions about the layout, colour, or the general look of the signs? (This is not a discretionary matter in as much as these matters are determined by the Federal Identity Program (FIP)).
- Do shiny surfaces pick up reflections from the overhead lighting making them hard to read?

2.C Observing Visitor Reactions

2.C.1 Getting Help from the Information Desk Attendant

Receptionists may have special insights into the problems that visitors experience in your building.

Most of them will co-operate with you in helping to improve the general level of wayfinding in the building. Ask the information desk attendant to keep a daily log. This log should be submitted once a week for review during this data-gathering exercise—and one week in every month as an on-going attempt to keep updated on the situation. Discuss details with the attendant to assure them that you are reviewing their information. The log should be kept out of the sight of visitors.

Each building has its own problems. Not every building manager will need the same information. But as a minimum the log should contain;

1. Numbers of visitors who have asked for information on how to get to the:

(names of major generators of visitor traffic)

- ☐ public washrooms
- ☐ retail area, if applicable
- ☐ other

(use a special symbol for persons in wheelchairs or with perceptual problems)

2. Numbers of visitors who have returned to say they had difficulty finding their destination: (same list as before) (again, use special symbol for handicapped).

3. Of the disabled visitors asking for information how many were:

- ☐ mobility impaired
- ☐ perceptually impaired
- ☐ both

The above should provide reliable quantitative information that you will find useful. The following information is far more subjective. Ask the attendant to give you opinions on:

- the most difficult or easiest destination to give directions to; and
- the destination that visitors seem to have most trouble reaching.

2.C.2 Getting Help from Visitors Themselves

It was suggested in the Introduction that visitors be followed unobtrusively around the building occasionally, to observe their behavior. Seeing them hesitate at a decision point and look around for help will be instructive. There may be many reasons for this. Maybe they did not see the sign or they saw it but it didn't contain the information they were expecting at this particular place. Whatever the reason, you will have learned that this particular intersection, or decision point, is a problem area.

In such cases, it is a good idea for you to introduce yourself and to ask if you can help. While you are doing this, if the visitor has time, ask if:

- the signs were helpful and why;
- they saw the building directory by the front entrance;
- the words were well chosen;
- the maps were useful;

- the letters were big enough to read; and
- if the direction signs were properly placed.

Make up other questions based on the knowledge of what visitors' problems are in the building. Try however to be discreet as people often feel that it is their fault if they cannot understand the information. Do not make the visitors feel uncomfortable in answering your questions or they may report "no problem".

2.D Annotating Your Building Plans

Your last evaluation activity will be a tour of your facility with building plans and the Checklist from section 2.E. First you will need to obtain several small-sized building plans. On one set you will trace (in coloured markers) the routes, destinations and decision points that comprise wayfinding in your facility. (The other sets will be used in Part 3 to document your solutions.) Much of the information entered on the plans has been gathered by the commissionaire's log, from tenants in and from unobtrusive observation of visitors' behaviour.

On the plans you should identify or trace:

- the location of basic building facilities such as the parking garage or the public washrooms (also those washrooms, if separate, accessible to wheelchair users);
- the location of those major destinations attracting the most visitors, (e.g. a pension office, or a post office);
- the information desk;
- the main building directory and the map of the building's layout;
- the route for able-bodied wayfinders from outside of the building entrance(s) to all of the above destinations (include any alternate routes from each entrance to the above for all wayfinders also);
- the routes people in wheelchairs are obliged to use if different from the above; and

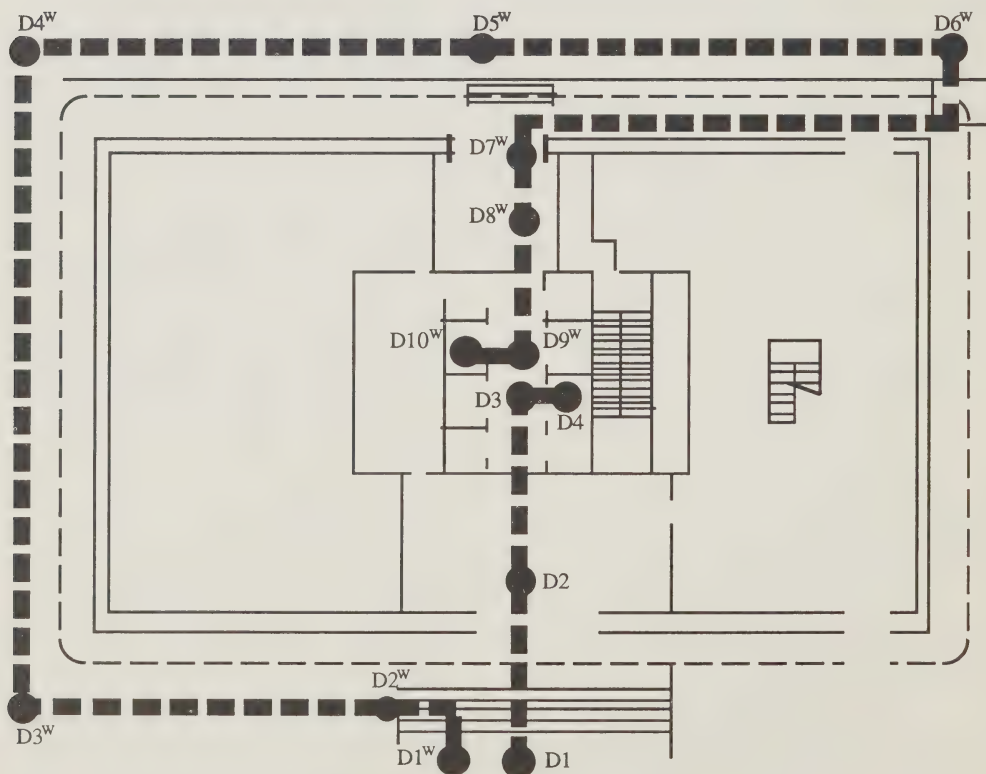
- emergency evacuation routes for disabled and able-bodied persons.

Typically, you will start the line at each main entrance. Trace the line to the information desk, directories, and then to the elevators, stairs or escalators, as applicable. Then transfer to the appropriate level for each destination and continue your coloured lines to the end of the route. If any departments or services in the building habitually refer visitors from one to the other, trace the route(s) used. An example of a sketched building plan is included at the back of this document.

Next, go systematically back over the routes traced on the plans noting where decision points are and mark each with a bullet (●) as shown on the example plan. These are the places en route where people are compelled to make a decision before they can continue. Such decision points occur wherever there is a horizontal or vertical direction change (e.g. corridor intersections, elevators, stairs) or where reassurance information, though redundant, would be desirable (i.e. in long corridors or in settings where the continuity of the route is obscured or appears ambiguous.)

Illustration of route and decision point mapping

Correspondence between decision point D and information required to enable wayfinders to reach destinations. Note the much longer route, taken by people in wheelchairs compared to the pedestrian route—10 points compared to 4.



Wheelchair route

- D1^w - In the absence of a visible ramp at the main entrance, information is needed saying where the building may be entered
- D2^w - To go to the rear of the building
- D3^w - Reassurance directions to entrance ramp
- D4^w - " " " " "
- D5^w - " " " " "
(because in this building a ramp was not visible from D4^w)
- D6^w - The ramp
- D7^w - The entrance door
- D8^w - The building directory or information desk
- D9^w - The elevators
- D10^w - Floor numbers

Pedestrian route

- D1 - The entrance doors
- D2 - The building directory or information desk
- D3 - The elevators
- D4 - Floor numbers

The purpose of tracing routes is to illustrate how complex or how simple the circulation pattern is in your building. You may not have been conscious of it before because of the familiar setting.

It is important to be aware of the number of routes, their length and direction changes to ensure adequate wayfinding information. The route, destination and decision point entries on your plans also serve the purpose of structuring the Checklist, or more specifically, the evaluation of the wayfinding system at all of the major decision points.

As you administer the Checklist, refer to the plans to verify that the information at each decision point is adequate in content with respect to the destinations along the route being evaluated. Also note how information is presented. While touring the building, keep records of your observations on the plans with notes such as "planter blocks sign—move". Such comments will assist you in drawing up solution work plans.

2.E Evaluating Your Building: The Checklist

Evaluating your Building: The Checklist

Building _____

Location/City _____

Date
evaluated _____

By _____

Before starting on your tour, please note you are going to have to go outside to complete it. Pick a good day. Give yourself every chance to make a fair evaluation. Remember that you are going to look at your building from the viewpoint of a first-time visitor.

Remember too that a visitor might be disabled in some way. This should be taken into account as you go about looking at the wayfinding information in your building.

Don't try to remember what the signs or conditions at a particular place are like. It is best to go to the site and look at them.

The results of filling in accurate answers to this questionnaire will help to determine the level of service that will be available to the public in this facility.

The purpose of the Checklist is two-fold:

- it is a way of completing the data gathering process; and
- it also gets you involved with the building's wayfinding system in order for you to reach decisions and take action.

To begin you may wish to identify only those destinations and routes which have been identi-

fied or reported as troublesome. Later the entire facility can be examined in the same way.

The Checklist is organized to follow the routes visitors would logically take i.e. through the entrance to information, the directories or the commissionaire, then to the elevators, and so on.

There is only one copy of the questions regarding entrances, elevators, stairs, corridor intersections, etc. These Checklist pages, which should not be written on, can be xeroxed in the necessary quantities to cover all elements in your building. On these duplicate sheets, when evaluating for example an elevator lobby, identify the location in a manner significant to yourself both on the Checklist page and on the plan. This will aid you later in matching the two.

Before starting off around the building with the Checklist and the plans, answer the questionnaire ("To start off") on page 17. This is not officially a part of the Checklist and no one but you will ever see your answers. Its purpose is to focus your mind on the sorts of issues that you will be dealing with as well as to test your memory.

When you have completed the Checklist, continue with the following questionnaire ("To finish off") on page 18. You may be surprised to learn how your opinions about wayfinding in your facility have changed in the interval.

* This symbol is used as a means of highlighting a particular point in the survey or to provide explanations of why a particular statement is important.

Note: All signs in federal government buildings should be bilingual with the two official languages side by side, unless space restrictions dictate otherwise. The references in the Checklist regarding the messages on signs refers to both French and English.

To start off (Questionnaire)

- Is there a good view of the building sign, both up and down the street, for a person approaching by car?
- Is there an equally good view of this sign from, the bus stop, for those approaching the building by public transit?
- Is the symbol of accessibility clearly visible to persons in wheelchairs at the entrance; will they know which door to use?
- Is the building directory the first thing a person sees on entering the building?
- If you were standing beside that building directory, do you think the light level is adequate to read by?
- Are all of the major federal tenants listed on the building directory?
- Are they listed in the plain language used by the visitors themselves when they ask for directions?
- If your building has two entrances, are there directions from both to the main lobby?
- If a blind person was standing in one of the elevator lobbies on a floor other than the main, would they be able to tell what floor they were on?
- If there is a single set of washrooms for the public's use (or a single set of accessible washrooms) in your building, are there directions to them on every level?

To finish up (Questionnaire)

- Could you see the building sign from both directions?
- Was it visible from the bus stop?
- Was the symbol of accessibility located correctly to indicate which entry a person in a wheelchair must use?
- Was the building directory the very first thing you saw when you came in from outside?
- Was the light level adequate? Did you try reading some fine print?
- Were all the tenants listed on the directory?
- Were they all listed in the sort of language the visitors would understand?
- Are there directions from each entry to the main lobby, and are they adequate?
- When you were in the elevator lobbies did you check the floor numbers on the door jambs—and were they tactile?
- Are there directions on all levels for washrooms which have been reserved for public use, or to those which are accessible to people in wheelchairs?

2.E.1 Visitor Parking Lots and Garages

* Start your survey of the building by observing the signage from the viewpoint of a visitor coming by car trying to find the entrance to the parking lot or underground garage. Is the en-

trance well identified by a sign that is visible from both directions? Once inside the lot or garage, and having parked the vehicle, will the visitor find the way easily to the shuttle elevators or the building entrance? Is adequate provision made for disabled persons?

2.E.1.1 Approaching the Visitor Parking Lot (or garage) By Car (if none, go to the next section)

- The primary building sign should be clearly visible to motorists approaching from both directions. It should be able to be illuminated when it gets dark.
- The actual entrance to the parking lot (or garage) should be clearly identified as an entrance to the motorists approaching from both directions. It should be clearly signed with the words "Public Parking" in both official languages. The sign should be illuminated.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes
-
-
-

2.E.1.2 Visitor Parking (if none, go to the next section)

- Visitor parking spaces should be clearly identified with time restrictions and/or the relevant data clearly displayed. If visitor parking spaces are out of the way or distant, there should be directions to them, particularly in garages.
- Visitor spaces reserved for the mobility impaired should be identified by the symbol of accessibility.
 - * These spaces should be close to the building entrance or the shuttle elevator. Access from them to the building or elevator should be barrier free.
 - * If these spaces are out of the way or distant there should be directions to them.
- There should be signs encouraging visitors to make note of their level and aisle numbers.
- If visitor parking spaces are out-of-the way or not close to the shuttle elevator, there should be signs directing to it.
 - * The route selected for signing should be the quickest route to the elevator with the least exposure to high-traffic lanes.
 - * The signs and the shuttle elevator doors should be well lit.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes
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2.E.2 Entrance(s) to the Building

* Now put yourself in the place of visitors coming to the building on foot or in a wheelchair. Start at the bus stop or car drop-off area. This time it is not the entrance to the

parking lot visitors are looking for but, the entrance to the building itself. Is there a sign out front identifying it? Are there any obstructions hiding a clear view of it in both directions? Can visitors see the main entrance? These are some of the things to look out for.

2.E.2.1 Approaching the Building on Foot or In a Wheelchair

- There should be a clear view of the building entrance from both directions.
 - * If there are landscape or other elements which will obstruct this view of the entrance, the visibility of the primary sign becomes even more important.
- The primary sign should be clearly visible to pedestrians and persons in wheelchairs approaching from both directions.

- ☐ No change(s) required
☐ Not applicable
☐ Make these changes
-
-
-

2.E.2.2 Outside the Main Entrance

- If this is the main point of entry to be used for the mobility impaired, the symbol of accessibility should be clearly visible.
 - * It should also be properly mounted at 1300 mm from the top of the sign to the ground.
- If this is not the main point of entry to be used for the mobility impaired, the symbol should still be displayed, but with an arrow directing, via a barrier-free route, to the nearest accessible entrance.
- Outside this alternative, barrier-free entrance, the symbol of accessibility should be clearly visible, mounted at the proper height (see Appendix B.15).

- ☐ No change(s) required
☐ Not applicable
☐ Make these changes
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2.E.2.3 Drop-Off (if none, go to the next section)

- The drop-off area should be clearly identified as a non-parking area.

- ☐ No change(s) required
☐ Not applicable
☐ Make these changes
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-
-

2.E.2.4 Main Entrance Used by the Public

- The building name and/or address should be displayed on or near the door at a height not to exceed 1600 mm.

- * The letters should be at least 22 mm high.

- There should be a call or control button at the entrance used either to request assistance or to activate the door.

- * Such buttons should be located 1100 mm off the ground.

☐ No change(s) required☐ Not applicable☐ Make these changes

2.E.2.5 Other (alternative) Entrance(s) Used by the Public (if none, go to the next section)

- The building name and/or address should be displayed on or near the door at a height not to exceed 1600 mm.

- * The letters should be at least 22 mm high.

- Once visitors are inside this alternative entrance, they should see signs directing them to the main lobby, information desk, elevators, or to escalators if these are not visible.

- * These directions should be in letters that are at least 40 mm high, mounted between the 1300 mm and 1600 mm levels.

☐ No change(s) required☐ Not applicable☐ Make these changes

2.E.3 Main Lobbies

* Now that visitors are inside the main entrance, they need information as to where their destination is located and how to get there. This verifies the importance of having the building directory and/or the information desk the first thing they see.

2.E.3.1 Inside the Main Entrance

- There should be an unobstructed view of the information desk and/or the building directory from the main entrance and from other accesses to this lobby.
- There should be a clear pathway to the information desk for both mobility or visually impaired visitors.
- If the elevator lobby is not clearly visible from the entrance or from other major accesses to the main lobby, there should be signs directing visitors to it.
 - * The lettering for such signs should be at least 40 mm high and be mounted no higher than 1600 mm off the floor.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
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-
-

2.E.3.2 Information Desk

- This unit should be located in the lobby to properly serve the needs of visitors.
 - * It should also be clearly identified by the word "Information" in letters that are at least 100 mm high.
- The bilingual attendant should be trained to deal appropriately with the special needs of disabled persons.
 - * He/she should also be specifically trained to deal with the needs of the perceptually handicapped, as identified in Appendix E.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.3.3 Building Directory

- The messages it displays should be bilingual and in plain language that is descriptive of visitor destinations or needs, rather than a listing of government departments.
 - * For example, "Passport Office" is preferred to or to be used as well as "External Affairs Canada".
 - * The directory should be identified by the word "Information" in letters that are at least 100 mm high.
 - * The lettering for major destinations should be at least 22 mm high, while that for other listings should be at least 12 mm high.
 - * Information should be displayed in "bundles" of no more than 5 lines at a time, separated by a space, etc.
 - * No message in the directory should be mounted at a level which exceeds 1600 mm off the floor.
- The building directory should be close to (or should contain) a simple map or plan of the building. Displaying its layout, circulation paths (horizontal and vertical) and the locations of major destinations, including public facilities such as washrooms.
 - * This map should be aligned according to the actual layout of the building or complex.
 - * Lettering on the map should not be smaller than 12 mm high.
- The light level in the vicinity of the building directory should be such that this page of the Checklist can be read without difficulty. The sign should be without reflections from natural or artificial light.
 - * This can be ignored if the building directory is backlit.

☐ No change(s) required

☐ Not applicable

☐ Make these changes

2.E.4 Elevators and Stairs

* Begin this section by studying wayfinding information in your building with signage in the shuttle elevator lobbies and in the underground garage (if there is one).

Observe people’s actions when they get out of the elevators. Do they look as though they are

getting the information they need from the floor directories? Do they ask a lot of questions? Do they look around for information?

Check inside the elevator cars to see that controls are positioned to accommodate persons in wheelchairs. Finally, check the stairs and stairwells to ensure that they are also properly signed. (See Appendices B.9 and B.10.)

2.E.4.1 Inside the Parking Garage (if none, go to the next section)

- There should be directions from the visitor parking spaces to the shuttle elevator.
- As visitors approach the shuttle elevator lobby, a large sign identifying their level and urging them to remember it should be in view.
 - * The lettering for the level should not be smaller than 300 mm.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes

2.E.4.2 Inside the Shuttle Elevator Lobby (if none, go to the next section)

- The sign identifying the level should be repeated using the same size of letters as is used outside.
 - * Locate such signs so that they are visible from inside the elevator car when the doors are open.
- If the garage does not operate on a 24-hour basis, hours of service should be posted in this lobby at a height not to exceed 1600 mm from the floor.
 - * The size of the letters should be at least 22 mm high.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes

2.E.4.3 Elevator Cars, Interiors

- The position indicators located above or beside the doors should display digits that are at least 22 mm high.
- Car controls should be physically accessible (i.e. reachable) by persons in wheelchairs.
 - * None should be located higher than 1400 mm (or lower than 900 mm) off the floor.
- Car control buttons should be a minimum of 20 mm in diameter, displaying sanserif characters that are not less than 15 mm high.
 - * They should be in two parts with the tactile portion on the left.
 - * There should be good contrast in the legibility of the information on the buttons. (Simple embossing will not suffice. Good contrast means black on white or its equivalent.)
 - * They should contain standard symbols (see Supplement No. 3-1982 to CSA Standard B44-1975).

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
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2.E.4.4 Main Elevator Lobby

- If the exit from the shuttle elevator is not close to, and visible from the main elevator banks, there should be direction signs to it.
 - * See section 2.E.3.1 for letter size and mounting height.
- If the main elevator banks are not visible from the main entrance, there should be direction signs to them.
 - * Again, see section 2.E.3.1.
- The floors served by each elevator bank (in the case of high-rise, low-rise, banks) should be visible and clearly identifiable, from outside and inside the individual elevator lobbies.
- The main floor level should be identified in visual and tactile letters or digits on both door jambs of all the elevators serving the main lobby.
 - * They should be mounted between 1400 mm and 1550 mm off the floor in characters that are at least 40 mm high.
- The signal lights over the elevator doors (preferably red for “down” and green for “up”) should also be equipped with an audio signal identifying the direction of travel.
 - * Two separate sounds for “down”, one for “up”.
- If there are other elevator banks on the main floor of the building or complex apart from those serving the main lobby, they should be signed in the identical fashion to that of the main elevators.

☐ No change(s) required

☐ Not applicable

☐ Make these changes

2.E.4.5 Elevator Lobbies, Other Than on the Main Floor

- The individual floor levels should be identified on both door jambs in visual and tactile form, raised a minimum of 1 mm at the 1400 mm to 1550 mm level in letters or digits that are at least 40 mm high.

- * These floor level identifications should be equally visible from the lobby side whether the elevator doors are open or shut.

- The signal lights over the doors should be equipped with an audio signal identifying the direction of travel.

- * Two sounds for “down”, one for “up”

- * The lights should be red for “down”, green for “up”.

- There should be as many floor directories in a lobby as there are banks of elevators.

- * Two banks of elevators require two floor directories.

- Floor levels should be identified on these directories in digits that are at least 100 mm high and other information on them in letters that are at least 22 mm high.

- * The bottom of the 100 mm digits should be positioned 1600 mm off the ground, while the remaining information positioned between the 1300 and 1600 mm levels.

- If the washrooms are not available to the public on a given floor (or throughout the building, apart from a single location) signs should be posted on every level directing to the washrooms that are available for public use. For example, “Public washrooms are located on level 2”.

- If the washrooms accessible to the mobility impaired are located separately there should be directions to these facilities alongside those identified above.

☐ No change(s) required

☐ Not applicable

☐ Make these changes

2.E.4.6 Stairwell Doors, Corridor Side

- The stairwell should be identified (as a stairwell and by a distinctive alpha-numeric) by a sign mounted at between 1300 mm and 1600 mm above the floor.
 - * It is appropriate for such a sign to be a combination of a pictograph with words. The size of the former should be at least 100 mm, while that of the latter should be 22 mm. Letters should be tactile. Ensure that the alpha-numeric designation cannot be confused with existing coding for other building features or components.
- Internally illuminated overhead signs should direct to alternative stairs for use in the case of emergencies on all cross-over floors in the building.
 - * This may be ignored if there are alternative emergency measures in force in the building.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.4.7 Stairwell Doors, Stairwell Side

- Levels should be identified in letters or digits that are at least 100 mm high, displayed at between the 1300 mm and 1600 mm levels.
 - * They should be located on the walls, not on the doors. See Appendix B.9. Letters should be tactile.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.4.8 Stairs

- The nosings of all treads in each flight should be visually different from the rest of the tread by sharp contrasting colours or visual texture. Alternatively, the top and bottom treads can be differentiated from the others by the use of colour.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.4.9 Ramps

- If ramps are not easily visible from corridors, there should be signs using the symbol of accessibility, directing to them.

☐ No change(s) required

☐ Not applicable

☐ Make these changes

2.E.5 Corridors and Intersections

* Two important aspects of wayfinding come together here: the routes that people take to their destinations (mainly through corridors) and the decision points along the way (mainly at intersections).

While completing this Checklist, take the opportunity to ensure that all of the information is at each intersection. Is it also up to date and accurate? Do the signs guide visitors along the easiest and most efficient routes to these destinations? Are the routes for the mobility impaired the same or different? If they are different, is all the information displayed at each intersection?

2.E.5.1 Corridors

- If any of the corridors in the building are long or have many intersections, directions to destinations should be restated. This confirms to visitors that they are proceeding in the proper direction.
 - * Emergency directions should also be restated, where appropriate.
- Emergency alarms should be equipped with a visual signal to complement the audio signal. This benefits the deaf as well as acting as a means of emphasis.
 - * This may be ignored if alternative emergency methods for assisting the deaf are in force in the building.
- Corridor wall projections (i.e. mounted fixtures) of more than 100 mm should be carried down to the floor or at least to 650 mm above the floor, so that they can be detected by cane carriers.
- Plants should never be allowed to obscure signs or sight-lines on the approaches to them.
- Potentially hazardous areas should be kept locked even if they are clearly identified.
 - * Such identification signs should be both visual and tactile.

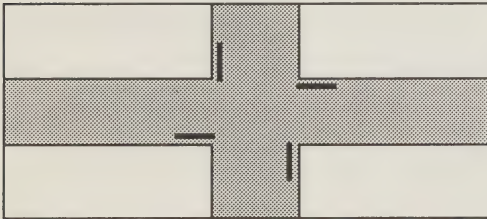
- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes

2.E.5.2 Intersections

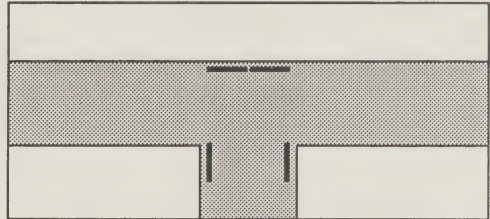
- Directional signs should be displayed at all four corners of a through intersection (in the shape of a “+” sign) as shown below.
 - * The letters should be at least 40 mm high and the signs should be mounted at between the 1300 mm and 1600 mm levels.
 - * Information should be displayed in “bundles” of 5 lines as described in section 2.E.3.3.
 - * Check to see that the content of each sign is up to date and accurate.
 - * Emergency information, if applicable, should also be displayed at these four corners.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes

Typical Locations of Signs at an Intersection with Four Corners



Typical Location of Signs at an Intersection with Two Corners Only



- Directional signs should be displayed at three locations in a “T” or “Y” shaped intersection, as shown below.
 - * Lettersizes and mounting heights are as above.
- Overhead, ceiling-mounted signs may be used in busy or significant intersections. When they are used the information they contain should be duplicated on wall-mounted signs having the characteristics identified above.
- There should be no more than four wall-mounted signs at one intersection. (See the drawings.)

2.E.5.3 Open, Plaza-Like Interior Spaces (if none, go to the next section)

- There should be some provisions for a visually-impaired person to cross such spaces unaided.
 - * This can be achieved in a number of ways. See section 3.C.3, "Route Delineation".
 - * If this is the goal, there should be no stumbling or overhead hazards in the open space.
- When such stumbling or other hazards exist such as open overhanging staircases, provision should be made through planters or other means, to prevent physical contact with them.
 - * Plants are a good idea, however, they should never obscure signs.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.6 Departments, Offices and Reception Areas

* Look for “permanent” signs that no longer serve any useful purpose. How many of them could be eliminated? Also watch for too many such signs at any one time in different sizes or colours, particularly at entrances to reception or work areas.

Remember that while most visitors enter these areas wanting information, too much of it can produce negative effects. They may resort to asking questions rather than trying to make sense of the signs.

2.E.6.1 Entrances

- These should be consistently identified by signs using the same plain language used in the building directory and located beside the doors or entranceways.
 - * The letters should be at least 22 mm high.
 - * The signs should be located between the 1300 mm and 1600 mm levels.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes
- _____
- _____
- _____

2.E.6.2 Reception Areas

- If there is no receptionist, it should be immediately apparent where to go for “Information”.
- If the area is equipped with counters with or without dedicated positions, it should be immediately apparent which of them provides “Information”.
 - * All dedicated positions should clearly identify the services they provide.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes
- _____
- _____
- _____

2.E.6.3 Open Plan Office Areas to Which the Public has Unaccompanied Access (if none, go to the next section)

- All major destinations should be clearly identified.
 - * If such identification is ceiling mounted, there still should be wall- or partition-mounted information duplicating it at as close to the 1300 to 1600 mm levels as possible.
 - * The letters on these particular signs should be at least 22 mm high.
- Exit signs should be displayed as required, to assist unescorted visitors out of complicated or built-up areas.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.7 Retail or Mixed-Use Areas

* This section applies only to building complexes in which government departments, offices or services are intermixed with retail environments on the same level or levels. It does not apply when such retail environments are located separately in an underground mall, for example. In this case, go to section 2.E.8.

2.E.7.1 Inside the Main Entrance

- There should be a strong differentiation in the design, colour, and general appearance of major directional signs for government destinations and those for retail services. This is not to say the two should not be co-ordinated; just that they should differ in an obvious and meaningful way.
 - * The FIP signs will be different from those for other purposes but they are all relatively small in scale. The reference here is to large-scale signs.
- In mixed-use complexes, there is a great need for clear and unobstructed views and identification of the information desk and the building directory.
 - * Both of these elements should be different in design from other elements in the lobby serving similar purposes but unrelated to government services.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.7.2 In Mixed-Use Concourses

- The design, colours and general appearance of major directional signs for government services, established on the street level or in the main lobby area, should also be continued on concourse level(s).
- Major identification signs for government services that are physically combined with commercial establishments, should reflect the same design intent as the directional signs. These signs should be within the guidelines established by the owner-developer for commercial signs in the complex.
- It is highly undesirable, from a wayfinding viewpoint, for government offices and services to be distributed throughout retail mixed-use environments. Instead, they should be concentrated or grouped together on each level wherever such a mixture of government and retail offices occurs.

- ☐ No change(s) required
 - ☐ Not applicable
 - ☐ Make these changes
-
-
-

2.E.8 Communal Facilities

* Communal facilities include the washrooms, cafeteria and any other another facilities in the building that may be used by the visiting public. When this is the case, such facilities should be clearly identified.

2.E.8.1 Washrooms for Public Use

- These facilities should be identified by signs beside the respective doors for the men's and women's washrooms.

- * They should be located at between the 1300 mm and 1600 mm levels. If words are used, the letters should be at least 22 mm high, and should be tactile.

- * If the building is designed to be universally "accessible to the mobility impaired", there is no need to display the symbol of accessibility beside every washroom.

- If certain washroom facilities within an otherwise accessible building are not accessible to the mobility impaired, information should be provided in the elevator lobby as to where the nearest accessible facility is located.
- If washrooms for use by the public are located in one location only, information should be provided in each elevator lobby floor directory as to where these facilities are located.
 - * Such information should be in letters that are at least 22 mm high, mounted at between 1300 mm and 1600 mm and should be tactile.

☐ No change(s) required

☐ Not applicable

☐ Make these changes

2.E.8.2 Cafeteria for Public Use (if none, go to the next section)

- This facility should be clearly identified at the entrance.
- If the cafeteria is not visible from the front (or main) lobby, there should be signs directing the public to it, or informing them on what level it is located.
 - * If a special route is required for mobility-impaired persons, this should be clearly identified.
- Hours of service should be clearly displayed at the entrance and menus and prices displayed inside.
 - * The size of all lettering should not be less than 22 mm.

☐ No change(s) required

☐ Not applicable

☐ Make these changes

2.E.9 Exits

* Getting visitors to their destinations easily and quickly is important. Equally important is assisting them in getting back to elevators or to the main entrance again just as easily and quickly.

Fire exits are important considerations that are handled through codes. Buildings cannot open for business unless the fire marshal's signs are installed. In addition to these, certain measures for the visually impaired are desirable.

2.E.9.1 Fire Exits

- In addition to the mandatory overhead illuminated fire exit signs, there should also be signs on walls duplicating this identifying information.
 - * The letters should be at least 40 mm high and should be mounted at between 1300 mm and 1600 mm off the floor.
 - * Areas of refuge should be identified as an assembly point used during emergency evaluations for disabled persons.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes
- _____
- _____
- _____

2.E.9.2 Other Exits

- Directions should be provided at corridor intersections to help visitors find their way back to the building elevators or to exits from the building to the street.
 - * Even if such directions are mounted overhead, the information should be duplicated in letters that are at least 40 mm high at between the 1300 mm and the 1600 mm levels.

- ☐ No change(s) required
- ☐ Not applicable
- ☐ Make these changes
- _____
- _____
- _____

3. Problem Solving

3.A Making Use of the Wayfinding Data

3.A.1 What Next?

By this time, you will have collected a large variety of information about the wayfinding process in your building. The information has been gathered from:

- the information desk attendant, who has gathered details on where the majority of visitors go, how many of them have disabilities of some type, and his/her impressions;
- tenants;
- visitors;
- the survey of deficiencies in your checklist; and
- the study of routes and decision points that organized how you went through the building when completing the Checklist.

You are now in an ideal position to know whether the wayfinding is as it should be, and if not, what needs to be done to rectify it.

If the Building Tenants Committee was to meet once all the evidence was gathered, you might want to do that now. On the other hand, you may prefer to wait until the planning stage, which is described later on in this section.

As a result of having gathered information, you will have noted that some problems are in more urgent need of attention than others. You will want to give the highest priority to these problems and lower priorities to the others. However, this may present a problem. If you attack problems a bit at a time, you may well end up with better-looking signage, but visitors may still have trouble wayfinding. Remember what was said in the Introduction: piecemeal remedies

won't work because each element of information is an integral part of a system.

Piecemeal "improvements" without consideration of a "whole" solution will not have been worth the effort you put into identifying the problems. Signage and wayfinding are not interchangeable terms.

What you must now do (to avoid this pitfall of thinking that "better" signs automatically guarantee better wayfinding) is to plan your work.

Don't by-pass the steps that are outlined below. In the long run, you will be glad you did the work and it is really quite painless.

3.A.2 Planning Your Work

Before starting, a few things you will need are:

- a complete set of architectural floor plans;
- a land-use plan showing the building's relation to the street(s) around it;
- a few felt markers in different colours;
- a recording method of what the signs are going to say, or the message content of each (see Appendix G and reproduce enough copies for your needs);
- the Checklist used in making your survey of deficiencies; and
- the (small-sized) floor plans you had annotated as you did the survey and on which you had identified destinations, routes and decision points.

There is a logic to the planning procedure and you should follow it in this order:

1. Examine your annotated plans to organize your solution strategy.
2. Identify reference points and non-signage solutions.
3. Identify the graphic information you will need to develop based on step 1.
4. Consider budget restraints.
5. Choose a course of action.

3.A.3 Plan Review

You should now take out your annotated building plans with the destinations, routes and decision points already recorded on them.

Destination Considerations

Destinations are the focus of verbal and graphic information whether it is identification or directional in nature.

Think about the destinations in terms of their types. Are they concentrated by activity? For example, are government offices together in one area; are private business offices in another? And the shops, are they all together?

If, in your building, the destinations are scattered rather than concentrated, your long-term wayfinding plans should include creating zones. (More about this later.) But if such destinations are similar in nature, use this fact to guide you in simplifying the signage you will be using.

Signage economies can be realized in the general circulation areas if you just post directions to government offices, or to the retail mall instead of trying to identify all key tenants by name especially if limited space prohibits you from doing so. People can easily infer that “Passport Office” is to be found among government offices, and that the store they want is in the shopping concourse.

Route and Decision Point Considerations

The data that you gathered in Part 2 may have revealed that some destinations are harder for people to find than others. This may be because the routes leading to them are too complex in terms of the number of decision points they contain.

You can easily compare routes by counting the number of decision points each contains. If the count for some is much higher than for others, you might think of including in your long-term planning, the possibility of relocating the desti-

nations in question. This will give you another opportunity to create destination zones.

Check whether the routes identified by the signs are all barrier-free for persons in wheelchairs. Refer to your notes about problems the mobility impaired may be having. Do any of them relate to these decision points?

Another route comparison you should make is between those used by people in wheelchairs and those used by ambulatory wayfinders. Again, you may discover route complexity expressed in the number of decision points. If the comparison shows that wheelchair users are disadvantaged, consider having a ramp installed where it would shorten and simplify the route.

As a Whole

The information elements noted on the plans can also be thought of as the structure underlying the more evident aspects of wayfinding information, i.e. the graphic elements. Part of the success of the information system is the location of graphic elements.

You should now begin to look at the data you gathered in Part 2. Make a comparison between the decision point locations and the location of existing signs, directories and maps, and of those you evaluated as being needed. You are making the comparison in order to tighten or tidy up the placement of this information. This may mean having to change around what already exists. Of course, during the evaluation, you noted those signs that are now obsolete.

For the moment you are just deciding where to place information. To this end, make some judgements about the following:

- Do decision points and the location of graphic information coincide? If so, this is good. Give some thought, however, as to how you could rearrange the information display to make the decision point more prominent.
- If decision points and information display don't coincide, what could be the reason? How could they be made to coincide?

For example, do the map, directory and information desk need to be located together? Or perhaps two or more passages meet in such a way that what is a natural decision point when approaching the junction from one direction is not the same when approaching from another; could the two points be combined?

When you are satisfied that you have clearly defined decision points continue with the next section.

3.A.4 Developing Message Schedules

You are also going to need some sort of a way of keeping track of the signs whose message content you are going to be focusing on. You may already have such a system and, if so, use it. If you don't, try this one:

- Give each individual new sign a number. This number is placed on a floor plan but is unrelated to the message that will accompany it on the message schedule. This number will tell you the following information:
 - what level or floor the sign is on;
 - what kind of sign it is; and
 - what its unique number in the modification program is.
- The individual numbers will be represented as follows:
 - level: 1–, 2–, 3–, etc. determined by the number of floors there are; use “C” for concourse and “P” for parking levels
 - type: 1 for general information signs
2 for directional signs at decision points, etc.
3 for identification signs at destinations
 - number: the unique number you give to each sign on any given level (start afresh with each floor)
 - Examples of the individual numbering systems are:

- 1–106 will be a unique number, not duplicated anywhere on the project, which tells you (or the contractor) that it is on the main or first level, that it is a general information type of sign, the 6th new sign on that level
- 6–235 will be another unique number for a directional sign, this time on the 6th floor, and it is the 35th sign you arbitrarily identified on this level
- P1–398 is an identification sign on the first parking level, and is the 98th sign in the series on that level—and so on.
 - On the business of determining between the three different sign (or information) types, you will find help in Appendix F.

3.A.4.1 General Information Message Schedules

- Identify the information desk, the building directory and the map (assuming these need changes to them) and give each a number in the –1– series.
- The message schedule dedicated to –1– type information should contain the words you want in the signs associated with these three elements.
- On the floor plans locate the hazardous areas, if any, for each level and note where warning signs are required. Give each a number in the –1– type series.
- Identify on the plans where you want to display prohibitions (if any), throughout the building. If most of these are no smoking signs, you may want at this time to identify areas, if any, that are set aside as smoking-permitted areas. Give all of these signs you locate numbers in the –1– type series.
- Hours of service signs, if any, should now be located, and numbered, on the plans.

- Finally, transfer these numbers to the message schedules and develop the appropriate content for each in both official languages.

3.A.4.2 Directional Information Message Schedules

- Using a coloured marker trace the routes of vehicle drivers who have parked in the garage or the lot, to the shuttle elevators, to the information desk, the directory, the map, and thence to the elevator lobby.
- You have, in 3.A.3, evaluated whether the signs are routing people by the best routes to these destinations. You decided on what the routes and decision points are to be. These will determine your next steps.
- Locate any new signs that are required at these decision points, and give each of them a number in the –2– series. (Remember disabled people. If their routes involve other decision points, make sure they too are signed properly.)
- If any departments or services in the building habitually refer visitors from one to the other, examine the route(s) used and the decision points. Check to see that adequate signage is displayed.
- Finally, do a double check on language and content (in both official languages). Be sure the same words are used to describe any given department or service throughout the entire building—from the building directory, through each corridor intersection to the final destinations. Also check that no destination on a given route is forgotten at any decision point. Do a

final check for completeness of the information.

- Now transfer all of the directional information to a set of message schedules reserved for –2– type information in the same way as is described above in the section devoted to general information signs.

3.A.4.3 Major Destination Message Schedules

- Using a coloured marker, identify the following on the exterior (land use) plans:
 - the location for the primary sign, and
 - the location for the secondary identification sign.
- Give each of these signs a number.
- Place the symbol(s) of accessibility on the plan and give it (or them) a number(s).
- Locate the small identification signs that go on or beside exterior doors and number them also.
- Proceeding to the main floor plans, circle the information desk, the building directory and the map. (These will be –1– type as they all provide general information.)
- The elevator lobby is another major destination. Circle it, locate and number the signs that are required in it. (You will find Appendix B helpful.)
- If your building has an underground garage or a parking lot, repeat the procedure of locating and numbering all destinations on the appropriate plans. Begin with the entrance to the garage or lot itself, then the visitor parking spaces, those for the disabled, and the shuttle elevators.

- Identify in different marker colours, the major generators (offices, departments, services) that you know your visitors visit the most. Locate the necessary identification (–3–) signs and number them as you have elsewhere. (Again Appendix B will be helpful to you in deciding what signs are required and where they go.)
- Identify the washrooms that are designated for public use, locate signs as required, and number them. If there are cafeterias or other public service amenities in the building, identify it also, locate the signs, and give each of them numbers.
- Finally, fire protection and emergency equipment constitutes a major destination. Circle in a coloured marker the locations of all the equipment needing identification, locate the signs, and number them.

That completes your identification of all the major destinations in your building. You should now:

- Locate and number all of the minor or less-important destinations in the form of smaller offices, etc. on the plans.
- Transfer all of this data to the message schedules and develop the appropriate content for each in both official languages. It is good practice to use separate sets for:
 - general information signs and other devices (–1– type);
 - directional signs at decision points (–2– type); and
 - identification signs at destinations (–3– type).

These message schedules not only require you to identify each new sign with a unique number (as shown on the location plans) but to also state

what the signs will say (in words and/or pictures or symbols).

The best method of conveying this information is to put what the symbol, if used, represents in brackets (), followed by the actual verbal message, if these are also to be used. Thus your message schedule, as you complete it for identification of destination on the 3rd floor might look like this (in both languages, of course):

<u>Sign no.</u>	<u>Message</u>
3–301	Reception
3–302	Job opportunities
3–303	Employment section
3–304	(Man/Woman) Toilets
3–305	(Man) Men
3–306	(Woman) Women
3–307	Group session reception
etc.	

You will follow this same procedure as you complete the remaining message schedules. Remember, the importance of ensuring that the content (what the signs say) is consistent everywhere. Avoid, for example, using “popular” names on a directory board and then departmental names on other signs for the same service.

3.A.5 Identifying Reference Points and Non-Signage Solutions

- Identify locations in the building where you can make use of building features such as existing sculptures, drinking fountains or free-standing stairs. Anything that visitors use to get their bearings or which attendants use when giving directions are building features.
- Check to see whether any of the signs previously identified by you on the plans (or whether any of the existing signs) particularly directional ones can be eliminated as a result of using reference points as part of the overall way-finding system.

- Wherever work (paint, tile, or other) is to be done in connection with highlighting these points of reference in the building, number them on the plans and describe the work to be done on a separate set of work schedules.
- Consider that there are other non-signage measures that you can take advantage of to improve wayfinding, e.g. handout plans, route delineation, or self-help telephones. All this is more fully developed in Action Plan 2.

3.A.6 Considering Budget Restraints

This is the last item on your planning list before you decide which Action Plan you intend to pursue. (Note, however, that you can combine elements of both!) This, in turn, will largely depend upon how much you can afford to do within the context of your budget. If that budget is virtually non-existent, you will opt for Action Plan 1 which deals with temporary approaches to the work. On the other hand, if you have been able to budget for improving the wayfinding, you may be able to go straight to Action Plan 2.

3.B Creating Short-Term Solutions—Action Plan 1

3.B.1 Temporary Signs

Temporary signs will always exist and there is no reason why they should look disreputable (or even temporary for that matter).

There are two types of temporary sign and both are legitimate. They are:

- signs intended to provide information about the location of a department or service that is temporarily relocated; and
- signs intended to provide permanent information, but in a temporary fashion, pending the ability to create a permanent sign to replace it.

Both of these should be made in as proficient a manner as possible. There is no excuse for hand-written signs because producing them professionally is so readily and inexpensively available.

This section provides you with information about this. Remember, however, that a temporary sign should never be allowed to become permanent. It is a good practice to identify on the backs of such signs (or better still, in a log) when you intend to replace each temporary sign with a permanent one.

3.B.2 Next-to-No-Cost Solutions

Once problems have been positively identified, there is no reason why a remedy cannot be started on as soon as possible.

Recognizing that this is far easier said than done, Action Plan 1 is in two parts. It deals with what you can do (and it is quite a lot) at little or next-to-no-cost.

Getting rid of signs that are not necessary is a good way to start, and is probably a next-to-no-cost remedy for one of the possible problems in your building: clutter.

But how can you tell whether a sign falls into this category?

- if it is stale-dated (referring to something that is no longer there, or a situation that no longer exists),
- if it is wrong (saying something is in that direction when it isn't; it is somewhere else),
- in the case of long-winded signs with excessive amounts of copy, if your observation tells you no one reads them anyway even though they are intended to save asking questions of the receptionist,
- if it is in a very bad state of disrepair (it should come down while you get it replaced).

Doubtless there are other good reasons for getting rid of signs that will occur to you. In the meantime, consider two more points.

First, if it is an illegal, temporary, hand-made sign posted by a frustrated employee, don't destroy it, it may be a necessary sign. If so, you will make it into a more respectable temporary sign (see section 3.B.3).

Second, clutter often results from too many different variety of signs, all side by side. This may also result in visitors not reading the signs. It is not necessarily a reason for getting rid of them, although if they are not being read, maybe they should go anyway.

On the other hand, if this is not the case and you observe that people do try to read them, put them into a series of same size or type of signs on a temporary basis as shown in Appendix C.1.

One excellent inexpensive way of reducing sign clutter in a building is through the use of the points of reference, which were described and discussed in section 3.A.5. If you can get the information desk attendants to direct people by making use of these building features, you will help the visitor at no additional cost to the building.

Consider also having the attendants give out small letter-sized plans of the building on which they trace the best route to a visitor's destination.

Making the signs consistent in the way they are displayed to the public is another valuable thing you can do. This should be done because it will help your visitors and because it also can be done at next-to-no-cost.

In Appendix B.1 there is an illustration which shows the "Info-band" between the 1300 and 1600 mm levels which should be reserved for the exclusive use of wayfinding information in all public buildings. Try to relocate all of your signs in this band—even if some of them are not proper FIP signs.

In taking signs off the wall (in order to relocate them) remember that they are affixed to walls in one of three ways:

- adhesives (foam tape);
- mechanical fastenings (screws into wall plugs); or
- a combination of both.

The foam tape can be made to lose its adhesion by blowing on the signs with a hairdryer. (If you try pulling the sign off, you may break it and take part of the wall with it.) Set the hair-dryer at a low-to-middle setting and direct the air around the edges. This will cause the foam tape to release without damaging wall or sign. Solvents may then be used to clean off the residue. Two-sided foam tape is available from local art-supply houses.

If the sign is affixed with screws, unscrew them and fill the holes with a cellulose filler such as Polyfilla and retouch.

If it is affixed by a combination, this will not be found out until the screws are removed and the sign still won't come off the wall. If this is the case apply the hairdryer.

Refer to Appendix B.1, particularly on the subject of where within the Info-band, you should locate the sign if it is less than 300 mm deep. The top of the sign goes at the 1600 mm level.

Turn to Appendix B.3 and B.4 (depending on whether the sign is for directional or identification purposes) and note where to place it, at an intersection or beside a door.

The assumption is made here that you will be relocating all your signs into the Info-band. "All" means non-conforming as well as proper FIP signs. This is appropriate and in the general interest. As a result, you are encouraged to do this. However, bear in mind that:

- the temptation to leave the temporary signs up permanently is to be resisted
- temporary signs are temporary: they will deteriorate much more rapidly than permanent signs
- temporary signs are extremely vulnerable to vandalism

- temporary signs, because of the ways in which they deteriorate, may be the cause of further problems for disabled people, especially those who are visually impaired.

All of these are reasons for converting to permanent signs as soon as possible.

3.B.3 Modest-Cost Solutions

This section deals with making temporary signs on a low-cost, practical basis while you are waiting for permanent signs. The assumption must be made that temporary signs will be as close to FIP standards as possible, particularly in the matters of colours and letterforms. There can be no change in letterform. It must be Helvetica (the kind of letterform shown in the FIP or PWC graphics manuals).

On the subject of colours, the letters must be white and the background as close to FIP as possible. (Black is an acceptable substitute on a temporary basis.)

There are many approaches to this problem. Provided the matters discussed above (letters and colours) are adhered to, all of them are valid.

Two methods are recommended in the Appendix (C.3 and C.4) for individual letters and pre-spaced legends. Both are practical, although one is more so than the other. Neither is very durable if abused. Therefore, if vandalism is an issue in your building, you will have to be on the constant look-out for missing letters or even missing signs. (You will find sourcing information about those two methods in the Appendix.) Whichever of the two recommended methods (C.3 or C.4) you decide to follow, these are the tasks you must be prepared to complete for each sign:

- You have already decided what your message will be. (This is the message schedule you have prepared.) Be sure it is bilingual and is grammatically correct in both official languages.

- Turn the message into a legend using white Helvetica, upper and lower case, pressure sensitive letters.
- Cut out the sign from some material. (This is the sign face.)
- Apply foam tape to the reverse side.
- Affix the finished sign to the wall within the primary Info-band, beginning at the 1600 mm level.

3.C Creating Longer-Term Solutions—Action Plan 2

3.C.1 Permanent Signs and Message Schedules

These are FIP-type signs, fabricated in accordance with the provisions of *Signage, Guidelines and Procedures*, published by Public Works Canada.

Whatever you have done in Action Plan 1 to provide temporary remedies to communications problems within your building must, sooner or later, be converted to permanent solutions. The word “permanent” is a bit of a misnomer because nothing is really permanent. Day-to-day wear and tear and vandalism will see to that.

The matter of what the signs are made of is crucial to how long they will last—particularly when you take vandalism into account. It is obvious that the die-cut vinyl letters that you used to make temporary signs are not a permanent solution. Even though the adhesive sticking the letters to the signs is described as “permanent”, it is extremely vulnerable to car keys, pocket knives, and determined fingernails. Please see Appendix C.6 for a description of fabrication methods for permanent signs.

The assumption is made that by the time you are ready to consider permanent signs for your building you have completed the tasks described in detail in section 3.A.2. As a result, you will also have a complete set of message schedules, typed onto a form similar to that shown in Appendix F.1.

You have also had the messages (or what the signs say) properly translated and you understand that the two languages are to be displayed side by side, when space permits.

- You have developed these messages so as to give prominence to the popular names used by the visiting public when they refer to departments and government services. You will also have ensured that these popular terms are used consistently throughout the building.
- You have composed these messages in a manner that permits you to have a line space between every five entries—particularly on signs with a lot of messages such as the building directory.
- You have double checked all corridor intersections to ensure that all of the directional information is present and that it is all accurate, up to date, and complete.
- You have checked out the wheelchair routes and whenever there is a need for special information for the disabled, it appears in your message schedule.
- You have given every sign its unique number in order to determine accurately the number of signs you are going to need. This also tells you what sort of a budget figure you must have in order to acquire them. (As a rule of thumb, double the cost of signs if you want to include installation costs as well, as you should.)

3.C.2 General Information

The following pages in the Appendix are particularly relevant to the elements described in this section. They provide you with design intent details on the signs, directories, maps and other devices. They also contain details on their mounting and orientation within the building:

- B1: the Info-band
- B5: maps and directories
- B6: elevator lobbies
- B8: elevator car controls
- B9: stairwells
- B12: hazardous areas

Maps and Directories


Typically, orientation in the main lobby is provided by some form of map or plan of the building. This is a good idea for two reasons even though it is well known that many people have difficulty in “reading” maps.

The prime reason for displaying a map or plan is to provide the visitor with an understanding of the “shape” of the building. Even if they are among those who have difficulties using maps, they will at least understand the building’s shape. The second reason for displaying such a map or plan is to show the visitors where they are and where their destination lies.

The fact that the details of the map will fade from their memories the instant they move away from it would indicate the desirability of keeping its design as simple and straightforward as possible. (It is not an argument for not having it at all.) Be conscientious about providing basic information without overloading it. All of the corridors, major destinations and facilities should be featured.

If, as is also desirable, this map or plan is repeated on other floors of large and complex buildings, visitors will find it useful in helping them find other destinations, in case they are referred elsewhere in the building.

The most critical thing about maps is how they are displayed. Even the crudest design, if properly aligned with the architecture and layout of the building, will be superior to a professional piece of work that is mis-aligned by 45 degrees or 180 degrees. (See Appendix B.5.) Thus, it is crucial that the map be a miniature version of the building itself. When visitors are looking at it, whatever is on the right side of the map is also on their right side and so on.

The illustration in Appendix B.5 shows a person, represented by a  looking at a map. From it they should be able to see that the stairs are on their right, the information desk is on their left and the way they came in is behind them. If this is so, they will know that they “understand” the map and that it will help them. If this map is repeated on other floors, it is just as essential it be properly aligned there too. This will entail searching for a wall or other means of display that will again ensure its proper alignment.

Another problem with maps is that unlike the countryside or the streets of a city, both of which can be portrayed in two dimensions, a building is very much three-dimensional. It has several (or many) layers one on top of the other. If too many of these layers are shown in the map, it will merely confuse. If too few are shown, it may be equally confusing.

This, however, is a fact of life. It is also one of the great limitations of maps and plans. There are alternatives. One is to show no more than one floor on a “page” of information. In other words, frame up somehow each floor or level and identify it clearly. This probably involves nothing more than the Main floor, perhaps the Mezzanine or Second floor, and then a typical floor or floors. Another is to make an “exploded” view of the building, showing an isometric view or something similar for all of the floors, with the main tenants. The ultimate is to provide a three-dimensional model, showing all the main levels. Think seriously about this if your building is at all complicated.

Another way is a device referred to as a “verbal” map which consists of a spoken description of the building, where the person is now, and where the elevators are, what “shape” roughly the building is, how many floors, and so on. There is reasonable evidence to demonstrate that people who are not blind would also benefit from such a “map”. A self-help telephone handset can be used very effectively to provide this kind of information.

There is still a reason for the conventional map in the main lobby. If it is properly displayed it will help visitors with that primary impression referred to earlier. The addition of the “spoken map” will make orientation even easier for many visitors.

The building directory belongs in this category of general information because its function is precisely that: to provide general information on the tenants in the building, the names of key personnel, and so on.

Generally speaking, building directory designs offer leave much to be desired. They may be built like towers, for example, with much of the information several metres over the visitors’ heads. (It should be as shown in Appendix B.5.) Another very common fault is to display messages on them like an over-sized telephone book. This is an error that leads people to avoid trying to get information from them. Environmental communications are not “read” in the conventional way. Information must be in little “bits” separated from each other, five at a time in directory listings, three at a time in directional signs.

Regulatory and Warning Signs

There are relatively few of either regulatory or warning signs in most public buildings. These are the do’s and don’ts that you want visitors who come to your building to know about. Regulatory signs are generally prohibitory and deal with such subjects as smoking or entry into restricted areas.

In addition to regulatory signage, there are warning signs, particularly in relation to hazardous areas. Appendix illustration B.12 shows the correct way to provide warning information that will be equally useful to sighted and sight-impaired visitors.

Stairs and Stairwells

The nosings of every stair tread should be visually differentiated by the colour or texture from the rest of the tread. Alternatively, the entire top and bottom treads should be differentiated from the rest.

There may be cross-over information in stairwells that may form part of an evacuation procedure. As noted in the Checklist, this can be dispensed with if other emergency methods are used in the building.

Elevator Lobbies and Car Controls

The visual and audible signals identifying the direction of travel by the elevator to persons in the lobby as well as other information in the cars fall into this category.

Appendices B.6, B.7 and B.8 are helpful.

3.C.3 Directional Signs and Other Devices

Signs

The following pages in the Appendix are particularly relevant to this section. They provide you with design intent details on the signs, their relative sizes and shapes and their placement on walls and locations at corridor intersections:

- B.1: the Info-band,
- B.3: intersections, and
- B.6: elevator lobbies.

The problems of wayfinding in a public building are not restricted to the visitors' ability to get themselves from the front door to a given destination. Because of referrals within the building, visitors must be assumed to be able to get from anywhere to everywhere. But if you provide signs on that basis, you will end up with a building full of signs that nobody will read because of their sheer numbers.

Even when used, directional signs should be used sparingly. They are the least effective of all the sign types and they contribute more to clutter and messiness than any other sign type. Your major use of directional signs should, at least in principle, be limited to locating them:

- at major corridor intersections,
- in elevator lobbies (on floors other than the main floor, in most cases), and

- close to a destination (or a reference point) if that destination is around a corner or not obvious.

Reference Points

Some buildings lend themselves better than others to the technique described in section 1.B.5 and which is so highly recommended throughout this *Guide*. This is the wayfinding technique that uses the environment itself, or more specifically, features within it as points of reference for helping people to get to their destinations.

If a much-used meeting room is described (by the information desk attendant and in the signs, wherever possible) as being "On the 2nd level, go left off the elevators to the drinking fountain" (or the planters, sculpture, etc.), you will be very effective in guiding people, with a minimum number of signs.

The implications, however, are that these points of reference are highlighted in an adequate fashion. In other words, they must be highly visible if they are going to be an effective ingredient in the wayfinding information system.

In this connection, a major department can serve very effectively as a means of getting people to a smaller office. For example, a person may want to get to Crown Assets Disposal Corporation's offices in a large complex in which they occupy a single office. That office, you happen to know, is right next to the External Affairs Passport Office. So your building directory reads (in both languages) "Crown Assets Disposal Corp. 305 (Follow signs for "Passports")."

As long as there are good directions to "Passport Office", the visitor wanting Crown Assets will easily find him or herself in the vicinity of that office. At the Passport Office, there should be a directional sign pointing to where the Crown Assets' office is, but only if this is not immediately apparent. When necessary, additional directional signs may be used to get visitors from a major destination like "Passports" to a smaller one.

The information on the building directory (instructing visitors to Crown Assets to follow the

signs to “Passport Office”) must be repeated on the floor directories as well. (Remember that people get referred from one department to another.)

Portable Maps

If there is an attendant at the information desk in the main lobby, equip him/her with a series of black and white letter-sized maps or plans of the building on which the route that a visitor should follow to arrive at a given destination is traced in a contrasting coloured marker.

This method should be used in conjunction with the use of reference points. These should be featured (i.e. highlighted) on the maps.

Self-Help Telephones

If such a unit is to be helpful to the maximum number of visitors, it must be fitted with a flux-coil that makes it compatible for people wearing hearing aids. In addition, it should have an amplifying feature for the hard-of-hearing who may not be wearing hearing aids.

The ideal location for such units is:

- inside the front doors of the building, particularly in cases where there is not a staffed information desk;
- a unit (or units) could be located as part of the building directory;
- in elevator lobbies, when warranted, located so as not to create traffic problems;
- in waiting areas where there are no receptionists;
- at selected major corridor intersections; and
- in busy reception areas to relieve the receptionist from having to answer standard questions at length.

It almost goes without saying that these self-help telephones must be well identified. Consider giving them a distinctive colour to identify them and to distinguish them from ordinary tele-

phones. Yellow, blue or white would be excellent choices. (Whatever colour you choose they must be the same colour throughout the building.)

In addition, they should be accompanied by a sign, preferably with tactile letters and Braille cells, with simple instructions on their use. This use will vary according to where they are located. In busy reception areas, to replace boring signs that don’t get read, they should be attached to a recording device that provides these answers—perhaps even on a pre-programmed multiple-choice basis. (“For information on such-and-such, press button 6; for other information, press button 7”, and so on.)

If the telephone is located in the main lobby, visitors will most likely want to use it for orientation and wayfinding purposes. In such cases it could be connected to the switchboard, to a receptionist in one of the more frequently-visited offices, or to the Commissionaire’s desk, if there is one.

Alternatively, it could also be pre-programmed to provide directions to different destinations and to provide a “verbal map” of the building. This will tell visitors who may be blind or low-vision people about the “shape” and complexity of the building, where the main elevators are, and so on.

There are many advantages to having telephone communications system:

- you will be showing your visitors that you (and the government) care about them,
- you will be providing the highest level of wayfinding information to all of your visitors, not just to the able bodied,
- you will be helping disabled people, especially those who are visually impaired, and
- you will be reducing the number of signs throughout the building.

This last consideration would be enough to justify the relatively low cost in any large or heavily-trafficed building.

There are many other devices that are either on the market or that are coming into widespread use such as the interactive video units which are so frequently seen in shopping malls and courses. These devices may, one day, be widely used in public buildings in the form of a co-ordinated series of unmanned mini-information centres which will provide information in the language of the visitor's choice with graphics, animated maps, and much more.

Temporary Relocation Of Government Services

You may wish to give consideration to the kinds of services offered by the government tenants in your building. Some may be seasonal with the visitor load increasing substantially at certain times of the year. For example, Passport Offices have annual peaks before the traditional vacation periods, and taxation offices are visited heavily during February to April by people seeking tax forms. If many people travel to an upper floor office just to pick up tax forms, an alternate auxiliary location may be suitable. On a temporary basis, a table or booth stocking these forms could be set up on the main floor with information posted on where to go if advisory assistance or other forms are needed. Such a measure, augmenting the existing office, could relieve the circulation load to an upper floor Taxation Office, something your tenant client may also desire.

Route Delineation

Consider changes you may wish to make in routes where people are habitually making the wrong decisions. Because architectural cues

may tell them one thing while you are trying to get another message across, they wander mistakenly into the wrong areas. You could therefore make your own environmental changes. A carpet runner judiciously placed (and with bevelled edges to prevent people tripping on it) may subtly redirect people in the direction you want them to take. Such a solution may also assist the visually-impaired, for instance, in reaching the information desk or the elevator lobby unaided. Placing furniture or large planters in locations where they screen possible circulation paths which you do not want people to take is another option. Such measures can be surprisingly effective.

Building Personnel Training

Try to ensure that attendants have some training in providing information and help to the perceptually disabled. Be sure they know to speak slowly, not to shout, and to look directly at the person they are serving, especially if the visitor has a hearing impairment. Above all, they should know not to put their hand in front of their mouth as they speak.

All attendants should have a pad and pencil so persons with speech disorders can communicate back and forth with him/her.

Finally, consider having letter-sized plans of the main floors in the building reproduced in black so that the attendant can, with a marker, trace the best route (as selected by you) to any destination in the building. Make sure that the map shows reference points (in sketch or symbol form) so people will more readily recognize them as essential elements in the wayfinding process.

Identification Signs

The following sections in Appendix B are particularly relevant to this section. They provide you with design intent details on the signs, their relative sizes and shapes, and their mounting on walls. They are:

- B1: Info-band;
- B4: door signs;
- B6/B7: elevator lobbies;
- B8: elevator car controls;
- B9: stairwells;
- B11: washrooms;
- B12: hazardous areas;
- B13: open-plan offices;
- B14: counters;
- B15: entrances; and
- B16: parking for the disabled.

Interior Signs

Typically, identification signs are located at the entrances to destinations, however, in open-plan offices there may be no “entrances” as such.

When there are doors, the identification sign is located on the latch side whenever possible and irrespective of any other consideration. Only when there is no room physically to accommodate the sign, as when a thermostat or other piece of equipment is located precisely where the sign should be, is the sign placed on the hinge side of the door. When there is no door in an entrance way, locate the sign by preference on the right side of the person entering.

As Appendix illustration B.4 shows the sign located in the Info-band, at the top of this band (with room for additional information to be added later, if necessary) at the 1600 mm level. It is affixed to the wall in the approved manner (preferably with screws) 25 mm distant from the door frame.

In open-plan office situations, there are neither walls nor doors. The Info-band is still used, however, identification signs are displayed on

screens at the 1600 mm level as shown in Appendix illustration B.13.

Typically some signs are placed on doors. This is generally the case where it can be assumed the door is always shut. (Washroom doors and those leading to hazardous areas are examples.)

It cannot be expected that the entrance to washrooms will always be on the main corridor. Just as often as not, there is an open entrance way to a passage leading to the washrooms. There may also be an entrance (off the corridor) to an open space in which these facilities are located. (See Appendix illustration B.11.)

In view of this, and in the interests of consistency of placement, identification signs, even for washrooms, should be beside and not on doors.

Letter sizes for these signs should be a minimum of 22 mm high. In stairwells, however, the levels should be identified in numerals that are a minimum of 60 mm high, and raised 0.7 mm.

There is a further exception to the rule for identification signs to be located beside doors. This occurs when what is to be identified is a service function at a counter. Appendix illustration B.14 shows how to identify services at dedicated positions when counters are involved. Note the importance of having one position permanently dedicated to “Information”.

Exterior Signs

Exterior signs have been left to the end because there is no real need to comment on them. For the most part, their form, and placement is fully determined by FIP. From the Checklist, however, the following exterior identification signs were identified as important. They are:

- the signs in visitor parking areas (if any) identifying parking spaces reserved for them, and identifying those for disabled people through the display of the symbol of accessibility;
- the identification of the building itself through a FIP primary sign which should display the name of the building and/or

address and, if feasible, the names of the major federal tenants; and

- the secondary business sign on or beside the glass door (see Appendix illustration B.15) with the symbol of accessibility clearly displayed; if this main entrance is not accessible, directions must be displayed in connection with the symbol pointing to the nearest usable entrance for people in wheelchairs.

3.D Future Considerations

You may have found that certain aspects of wayfinding in your building could not be simplified because tenant locations were relatively fixed. In the long-term though, you may be able to have an effect by keeping certain principles in mind.

There may be destinations attracting significantly more visitors than others. In such cases, it makes sense that these should be located in proximity to the building's entrances.

Conversely, if some offices have restricted public access or a minimal need for it, they could benefit from being located away from main circulation areas. Such spaces could be the Supply & Services Canada self-help stores that serve only government tenants. They have trouble discouraging public shoppers if they are within public access.

The notion of spillover may be advantageous as well. The clientele of one department could be encouraged to use the services of another. For example, Unemployment Offices often have a large number of people waiting. Locating an Armed Forces Recruitment Office opposite may generate more enquiries in that office.

Appendices

Appendix A. Glossary of Terms

None of the terms used in this *Guide* are truly technical, yet, some may be unfamiliar to you. This list of definitions is intended to help you with them. (Individual disablements are not included as they are discussed at length in Appendix E.)

Auditory map: Oral description of a building layout or complex space provided in the interests of orientation. Also referred to as a “verbal” or “spoken” map.

Blade: Modular component of a signface.

Braille: A method of writing words by means of dots, for the use of blind persons. Dots are arranged in “cells” and are raised. They are read by touch.

Building directory: Information, usually typographic in nature, providing the names of the tenants in a building.

Disability: In the context of health experience, a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

Environmental communication(s): Transfer of orientation, wayfinding (direction), and other information within the built environment, by means of signs and other communications devices or architectural features to enable people to reach destinations.

Federal Identity Program (FIP): The means whereby the Government of Canada identifies its facilities and its presence visually.

Floor directory: Information, usually typographic in nature, providing the names of departments or services on that floor and directions thereto.

Flush (left or right): The lateral positioning of a word or message, left or right, within the viewing area; as distinct from centred.

Glare: Undesirable degree of sheen reflected off the surface of a sign causing deterioration of legibility.

Handicap: In the context of health experience, a handicap is a disadvantage for a given individual, resulting from an impairment or a disability that limits or prevents the fulfillment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.

Helvetica Medium: Currently the most popular letterform with application to signage and the one selected by FIP for use in federal government buildings.

Interactive: Capable of being interrogated; a device used in environmental communications that can, on demand, produce information specific to a user's needs, generally through presentation on a video screen and/or through a telecommunications connection.

Legend: Alternative word for a verbal message; specifically relates also to die-cut vinyl letters or images.

Legibility: Ability of a viewer to see or discern the message displayed.

Lower case: Letters that are not CAPITALS.

Mobility: Ability to move about or travel safely, comfortably, and independently.

Non-verbal communication: One which relies upon symbols or pictographs for its meaning.

Official Languages Act: Makes provision for the use of English and French (the ‘official’ languages of Canada) and determines the form to be used in their display.

Pictographs: Glyph or symbol incorporated into a sign; hence pictographic to denote a non-verbal sign.

Readability: Ability of viewer to comprehend or understand the message displayed; compare to *Legibility*.

San serif: Letterforms without serifs (or “feet”).

Serif: “Feet” of a letter: short cross-lines at terminals of letters classified in this way (as distinct from *sanserif*).

Signface: Reading area of a sign on which are displayed its legends.

Symbol of access: Represents to a person in a wheelchair, specifically that the access (entrance) next to which it is displayed is accessible, and generally that the building’s facilities are similarly accessible.

Symbols: Glyphs or pictographs are pictorial representations used in signs to constitute a non-verbal means of conveying information. Such signs are called symbol signs.

Tactile or tactual: What can be physically felt, generally with fingers.

Tactile signs: Have raised letters that are interpreted or read by tracing with fingers over the surfaces. Letters are raised 1 mm.

Telecommunications Device for the Hearing- and Speech-Impaired (TDD): Device which enables visual typographical messages to be transmitted and received over telephone lines between one user and another.

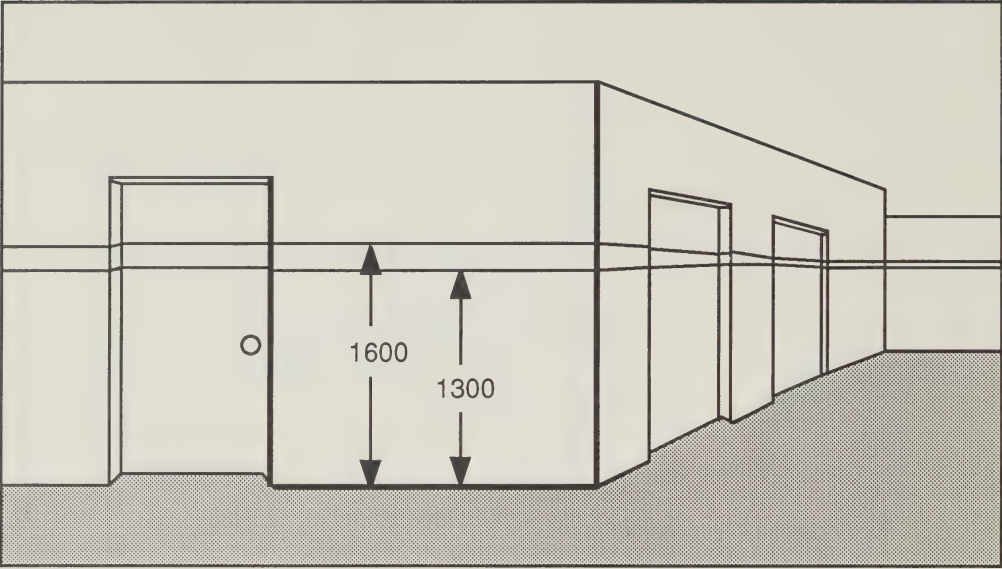
“T” Switch: Switch in a hearing aid that enhances a hearing-impaired person’s ability to use a telephone.

Verbal message: One which relies upon words (spoken or typographic) for its meaning.

Wayfinding: Ability of a visitor to arrive with ease at his or her destination.

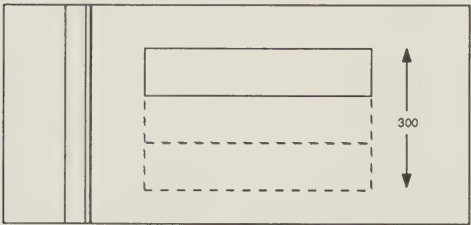
Appendix B. Mounting Details, Design Intent

B.1 The Info-band



The Info-band slices horizontally through all public buildings and is reserved exclusively for the display of wayfinding information. Exceptions to the rule that all information is within these bands are noted separately.

Note that when a sign occupies only a part of the primary Info-band, it is located at the top of the band at the 1600 mm level. Additional information, as needed, is displayed below the original sign to a maximum total depth of 300 mm.



B.2 Anthropometrics

B.2.1 Useful Data About People

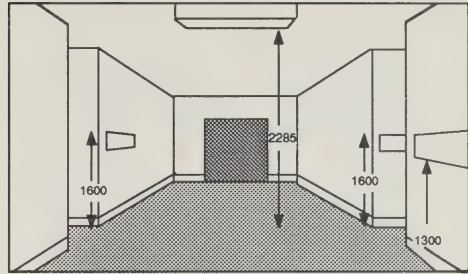
Eye levels of Canadians of average height

- standing man: 1620 mm
- standing woman: 1475 mm
- man in wheelchair: 1215 mm
- woman in wheelchair: 1175 mm

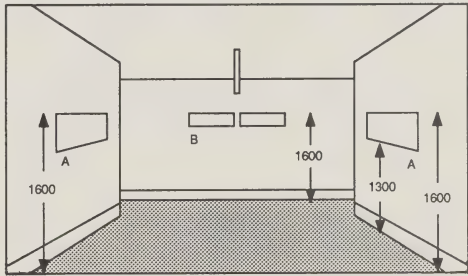
B.2.2 Useful Data on Signs, Controls, and Their Locations

- car controls in elevators: 900 mm for bottom button and 1400 mm for top button
- call buttons to activate power doors for the mobility impaired: 1070 mm off floor or sidewalk
- signs in corridors, etc: between 1300 mm and 1600 mm off the floor (in Info-band)
- lettersizes for signs: generally 12 mm on maps; 22 mm on identification signs; 40 mm on directional signs
- symbol of accessibility in exterior situations: 1300 mm from top of sign to ground
- tactile floor level indicators on elevator door jambs: between 1400 mm and 1500 mm of the floor, raised 1 mm minimum.

B.3 Intersections



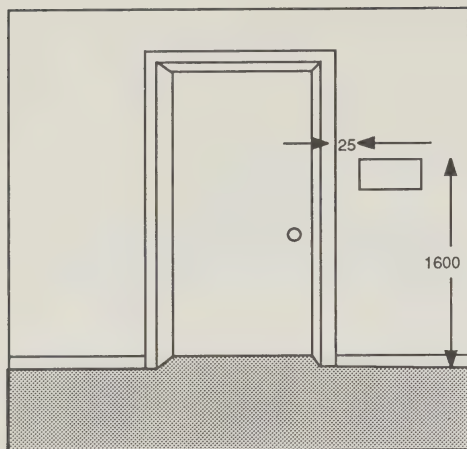
This shows the proper placement and locations for signs in a corridor intersection with four corners.



This shows the proper placement and locations for signs in a T-type corridor intersection.

The double sign (B) separates left-pointing information from right-pointing. This is only necessary if the number of messages exceeds eight (including the arrows).

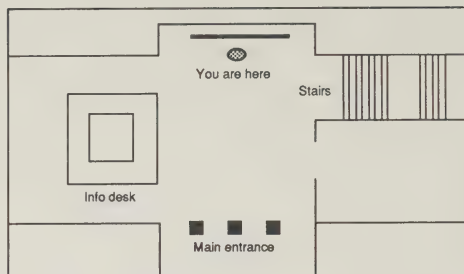
B.4 Door Signs



This shows the proper placement of signs beside office doors. They are by preference on the latch side at the level shown. Only when there are space limitations are the signs located on the hinge side.

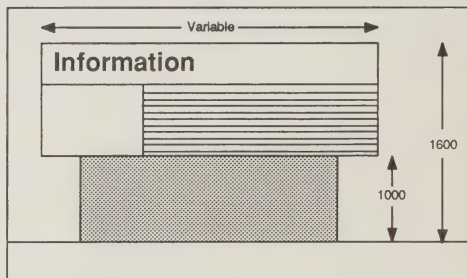
Symbol signs, conventionally located on the doors themselves, should also be located beside doors at the level shown.

B.5 Maps and Directories



Maps which are properly displayed are those that are aligned with the building itself. If a person identifies a destination on it, he/she can find the corresponding real location in the direction indicated by the map.

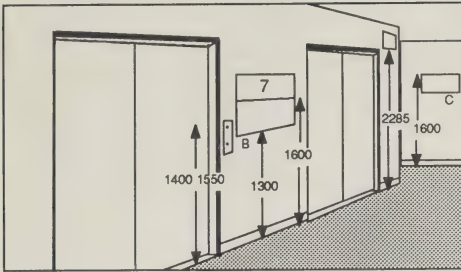
This is typically achieved by positioning the map north and locating it on a wall which has the viewer facing north as he/she looks at it. Note, however, that maps are more effective and easier to understand when they are mounted on a horizontal or slightly tilted plane so that people do not need to adapt or translate it spatially.



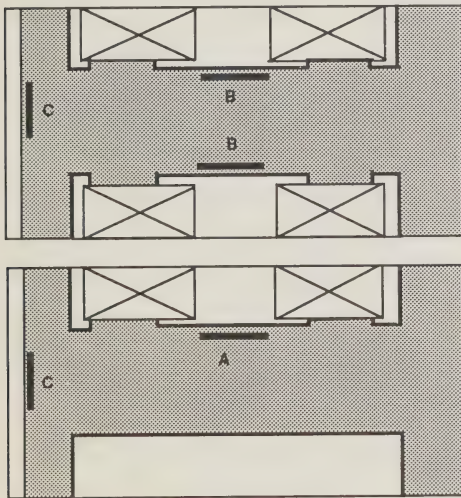
Building directories should not be built like office towers. To the extent possible the information they contain should fall within the Info-band. (As an exception, the band is extended downwards for an additional 300 mm and the word "Information" at the top projects above the 1600 mm level.)

Such a directory (containing a map of the building) must be correctly aligned to the building itself.

B.6 Elevator Lobbies



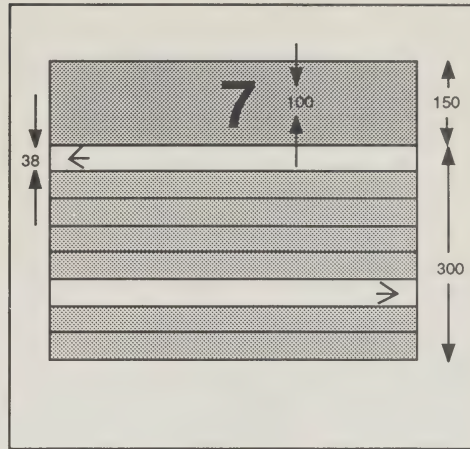
This shows the proper placement of information in an elevator lobby. As an exception to the general rule that signs are typically placed in a band between the 1300 and 1600 mm levels, the top portion of the directory projects above the 1600 mm level.



When there are two banks of elevators (facing each other) two directories (B+B) are required. In the case of one bank only, a single directory (A) is needed.

At either end of the elevator lobby a “splitter” sign (C) is located as shown.

B.7 Elevator Lobby Floor Directory

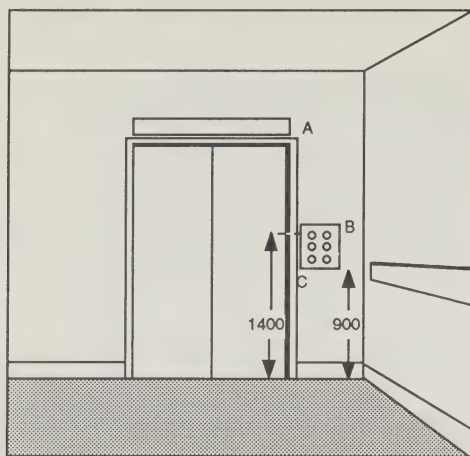


Presented is a typical layout for an efficient floor directory in an elevator lobby other than the main floor.

Note the size of the floor level is a 100 mm digit. Each strip or module in the sign is approximately 38 mm and displays 22 mm cap height letters with arrows.

Note also that while all text is flush to the left, the arrows are placed in the directions to which they point.

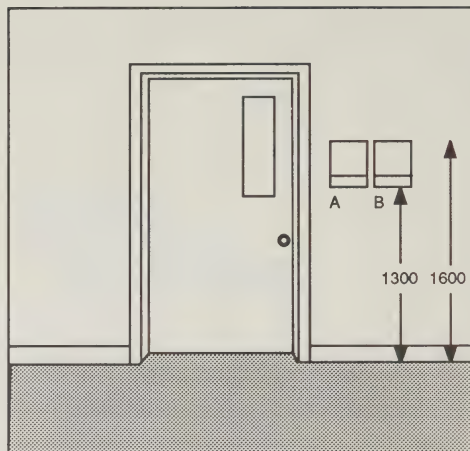
B.8 Elevator Car Controls



Floor buttons and other controls are located between the 900 mm and the 1400 mm levels. Control buttons are a minimum of 20 mm in diameter with tactile identification to the left of them.

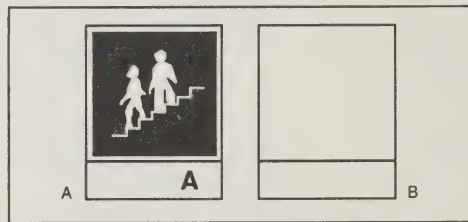
Car position indicators (A) are located over doors or over the control panel. They have characters not smaller than 15 mm in height.

B.9 Stairwells



This shows the proper signing of a door leading to a stairwell from a corridor.

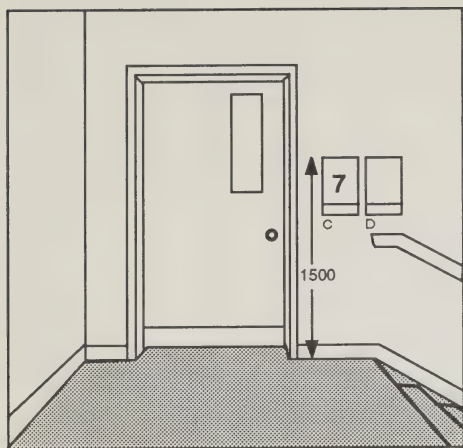
FIP calls for three types of symbol rendition of the stair's function (up only, as on grade level; up and down; down only, as on the top floor).



Such signs are blue with white characters or symbols as shown in (A). The legend beneath identifies the stair by an alpha designation in letters having a 22 mm cap height. Such letters are tactile.

Sign (B) displays emergency information, including cross-over floor information, if applicable, in letters having a 22 mm cap height.

B.10 Stairs

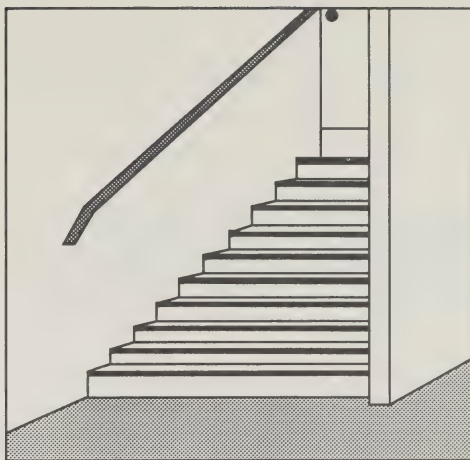


This shows the proper signing of a door leading from a stairwell to a corridor.

The signs are placed as close to the door as possible and not more than 300 mm from it.

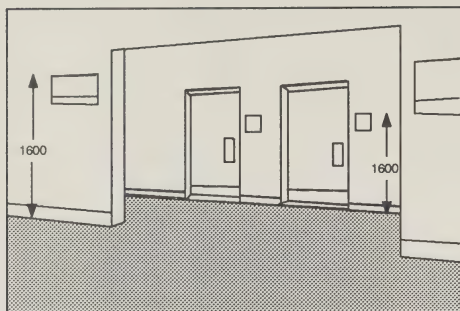
Sign (C) identifies the level in digits or characters not smaller than 60 mm raised approximately 0.7 mm. Such letters are tactile.

Sign (D) provides cross-over information, if applicable, in letters not smaller than 22 mm cap height.

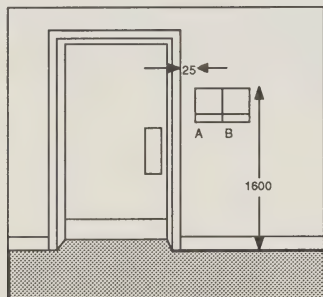


The leading edges (or nosings) of the treads in each flight of stairs are coloured differently from the stair colour to provide strong contrast.

B.11 Washrooms



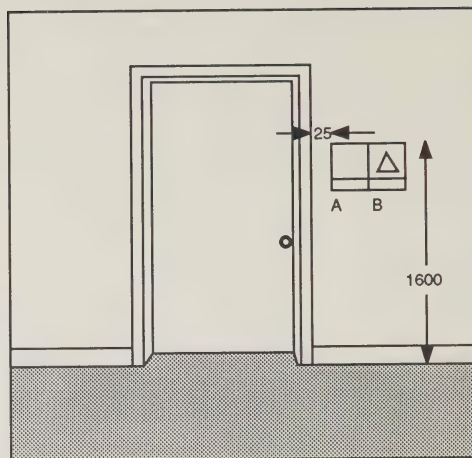
This shows how to sign facilities available to the public which are off the main corridor. The entrance way to the lobby is signed as well as the facilities themselves. In cases where the entrance is wide enough, sign both sides of it.



It may be practical to locate signs on washroom doors, but for the sake of consistency, it is preferable that they be located beside the doors, as shown. The sign incorporates the symbol of access, if applicable.

In the event that a washroom is not accessible to the mobility impaired, the symbol of access is not incorporated into the (A) sign. Instead, a separate sign (B) gives directions to the nearest accessible facility.

B.12 Hazardous Areas

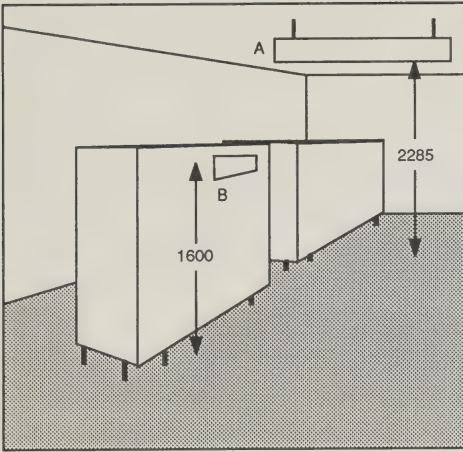


Doors leading to hazardous areas are generally kept locked in which case signage may be kept to a discreet suite number. However, when these doors are not locked, they are signed as shown.

Sign (A) displays the suite number and/or other relevant identification.

Sign (B) has a tactile (1 mm raised) triangle in which is located the appropriate symbol representing the hazard involved which is described below in words having a 22 mm cap height.

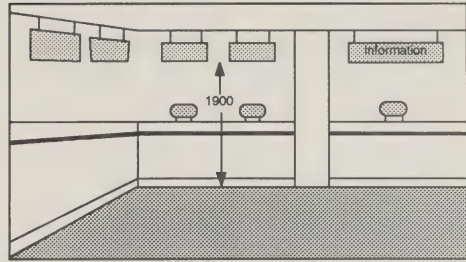
B.13 Open-Plan Offices



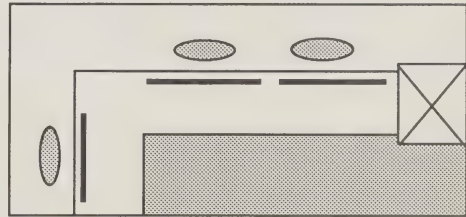
In large open-plan offices major destinations serving the public are identified in a prominent fashion by the display of ceiling-mounted signs (A).

For the benefit of people with low-vision, this information is duplicated on the screens themselves (B) at a lower level in letters having a cap height of 22 mm.

B.14 Counters



Signs over counters, as shown, for the purpose of identifying services at dedicated positions need not be at the 2285 mm level when bulk-heads or lowered ceilings in these areas prevent this.



The signs are aligned towards the backs of the counters as shown in the plan view.

Note that in such situations, one sign always identifies "Information".

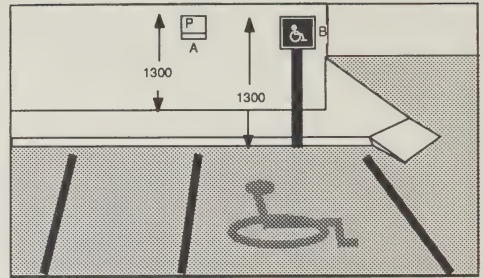
B.15 Entrances



As an exception to the rule that all information is displayed in a band between the 1300 mm and 1600 mm levels, the symbol of access in exterior situations is displayed just beneath this band, as shown (C).

The lettering on or beside the door (A) or (B) is the secondary building sign. (D) shows the position of the button actuating the power door to assist people in wheelchairs.

B.16 Parking for the Disabled



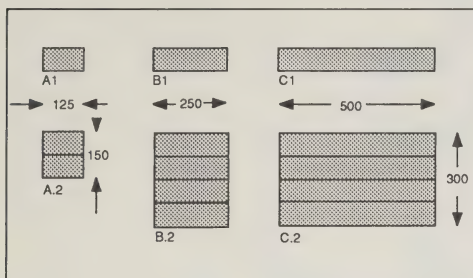
Parking spaces reserved for visitor use are identified as shown in a FIP sign (A) properly displaying the "P" in a square. The permissible duration of the stay is always a feature although it will vary from location to location.

The symbol of access (B) identifies parking spaces reserved for the exclusive use of disabled persons. Such spaces are typically at least 3900 mm in width. The symbol is also painted on the asphalt.

Appendix C. Creating Signs

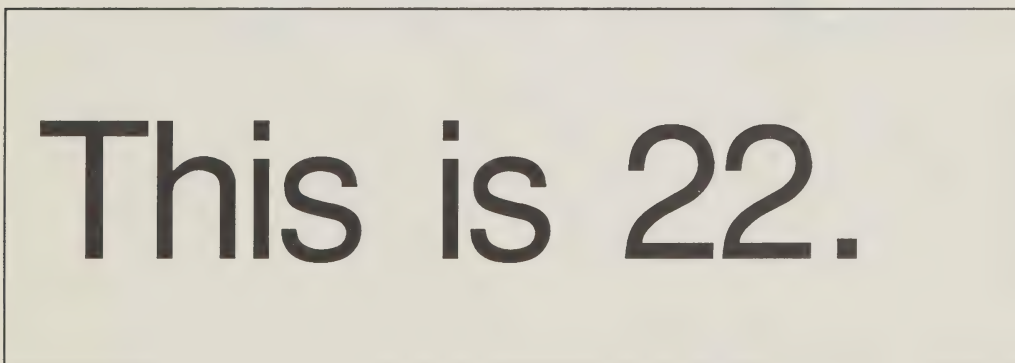
C.1 Sign Sizes

Here is a chart indicating their uses:



- A.1: room numbers only
- A.2: small symbol signs with words
- B.1: small office identification signs, accommodating room numbers with functions and/or names of occupants
- B.2: large symbol signs with words
- C.1: large version of B.1; may also be used for providing directions; may form modules or parts of the main building directory
- C.2: elevator lobby directories; directional signs at intersections; maps; if desired, may be sub-divided in half to provide general information.

C.2 Character Sizes



These characters are 22 mm high in Helvetica upper and lower case.

The characters below are 40 mm high in Helvetica upper and lower case.

This
is 40.

C.3 Individual Characters

C.3.1 Buy, from your local art supply store mounting board called “Melton Charcoal Grey TV Board Crescent 1224” or the nearest equivalent. It comes in sheets that are 560 mm by 1120 mm.

C.3.2 Cut it into one of the sizes shown in the illustration (C.1). These will be your sign faces.

C.3.3 Buy, from your local art supply store the white letters in the 22 mm or 40 mm sizes, as necessary. (Remember that identification signs have 22 mm characters, while directional signs with arrows have 40 mm characters.) Get “Letrasign” or “Instasign” or their equivalents. Some come in packages of 5 characters (all similar) to a package; others have a mixture of characters letters on a large sheet. All, however, are vinyl letters and digits, arrows, etc. with adhesive backing.

C.3.4 These characters all adhere instantly on contact with the mounting board. Try ruling a straight line on the sign face lightly in pencil to help you get them straight. Peel off the backing or follow the instructions and put them down onto the sign face. Smooth them down with a dull hard object to make sure they are well attached to the board.

C.3.5 Get some double-coated, pressure sensitive tape, 1.6 mm thick by 13 mm wide and apply it to the reverse side of the sign face, particularly all around the edges, and in the middle. It comes in 33 m rolls. Apply only to smooth, clean surfaces. If it is applied to masonry, this must be painted and dust-free. It takes a day or so to “cure” and then becomes very strong. During the curing period, it is not difficult to remove. (See if you can get it done over a weekend.)

What you have at the end of all of this is a good copy of a FIP sign. But remember it is still just a temporary sign.

C.4 Pre-Spaced Legends

The process is identical to Method 1 with this exception: instead of purchasing individual letters, complete legends are used. They come pre-spaced and pre-aligned between two layers of tape. You simply peel off the backing tape (thereby exposing the adhesive), lay down the legend and press or roll it well onto the sign, then peel off the carrier tape. There, instead of just one letter, is the whole message.

There are two ways of acquiring such complete legends. One is to buy them from local sign maker who has a “Gerber”, or similar machine.

The other is to acquire the machine itself. A purchase of such a machine can be beneficial particularly if you can spread its use over several buildings. An operator with typist’s skills is required. This will result to an in-house completely professional-looking legend for your temporary signs, as well as for making repairs to those which have been vandalized.

C.5 Symbol Signs

Although FIP makes use of charcoal grey for all of its exterior signs and for operational signs in interiors, it also specifies a series of colours for other signs which it calls “Common Use” signs. It is not recommended that you attempt to duplicate these colours in temporary signs.

You however, may want to introduce symbols or pictographs into some of your temporary signs remembering that one in four or five of your visitors has trouble reading words. These are available at local stationary and art supply stores, although the selection is limited. The Canadian Government Exposition Centre (Supply and Services Canada) is the sources for FIP symbol signs and these will be used for all permanent installations.

C.6 Fabrication Methods

At issue here are “the graphics” or, more specifically, how the lettering is applied to the sign face.

The alternatives for the lettering are:

- screen printing with epoxy inks on the first surface of an opaque plastic face;
- engraving on a sandwich material that is charcoal grey on the surface and white beneath; the fabricator engraves the letters in the surface so they show up white;
- sub-surface which involves screen printing onto a transparent sheet and physically burying it under a layer of clear plastic so that the graphics are beneath the surface; and
- etching letters that stand off from the background by 1 mm and are therefore “tactile” and can be read by people with low vision and by the blind.

All of the above systems are roughly comparable in price. They are also more expensive than conventional die-cut vinyl letters. With the alternatives you will never have to worry about replacing missing letters and the signs will look professional for many years. They are not indestructible, but they are as close to it as the state of the art permits.

You are encouraged to consider tactile (raised) letters because of their tremendous advantage of being understood by the sight impaired.

Appendix D. The Federal Identity Program (FIP)

This is the corporate identity program of the Government of Canada. The program's policy is issued by the Treasury Board (Chapter 470 of the Administrative Policy Manual). The applications of the Federal Identity Program (FIP) signage system are set out in the FIP Manual.

The Treasury Board has published a Design Guide which is quite specific about the way signs should look. It says less however about where signs should go or about matters related to orientation and wayfinding. On the "look" of a sign, you can recognize FIP signs because they have the following characteristics:

Generally

- Helvetica medium letters, upper and lower case in white.
- Dark grey (charcoal) backgrounds.
- Colour-coded shapes for symbol signs.

Exterior Signs

- All have dark grey modular faces and supports.
- Various formats for combinations of message elements.
- Generally have the Federal symbol at top left corner.
- Multi-occupancy signs have "Government of Canada" signature with building name or, the major federal tenants in the building are named.
- Other sign types feature organizational and branch titles with or without facility names.
- The lower band of each charcoal sign is a light grey module displaying the Canada wordmark.

Interior Signs

- Basic colours for operational signs are as for exterior signs.
- "Common-use" signs have white or black coloured letters and coloured backgrounds:
 - red on white for messages prohibiting an action,
 - white on black for those requiring obligatory action,
 - black on yellow for those indicating caution,
 - white on red for those indicating danger, and
 - white on green for emergency-related messages.
- Symbol signs, when used, are a combination of colours and shapes (circles, triangles and squares, depending upon what the sign is saying.)

This 1-2-3 *Evaluation and Design Guide to Wayfinding* may be read as a complementary volume to the FIP Manual or Design Guide.

Appendix E. The Needs of Disabled Visitors

E.1 Sight-Impaired Visitor Needs

- excellent contrast between the letters and the background
- good light levels wherever there are signs (if you can't read a newspaper right beside a sign, the sight impaired can't read your sign)
- no glare (from varnish or gloss or from a shiny surface on the signs)
- location between the 1300 mm and 1600 mm levels
- avoid mixing certain colours (particularly red and green) in signs because people with colour "blindness" (or deficiency) cannot distinguish between them and it will look grey
- large 22 mm letters as a minimum everywhere, irrespective of the so-called "reading distance" criteria
- visually impaired or blind people may rely on touch for their interpretation of signs which means they must be tactile: in Braille cells and in raised letters. One day all signs may be made with letters raised 1 mm off the background of the sign; right now, however, this is mandatory only on both jambs of elevator doors as shown in Appendix B.6, in elevator car controls (Appendix B.8), and stairwell signs (Appendix B.9)
- directional guides from entrances to information desk
- textural identification of major routes
- verbal or tactile information about building layout
- telephone service providing directional information to the building, and to the information booth

- auditory identification cues inside and outside elevators
- tactile identification of elevator car controls
- verbal and tactile information about major facilities, e.g., washrooms, telephones, cafeterias.

E.2 Literacy-Impaired Visitor Needs

- pictures (symbols) make the words easier to understand
- plain language in signs, simple and as few words as possible
- spoken language is the best of all; try the self-help telephone, as described in section 3.C.3.

E.3 Hearing-Impaired Visitor Needs

- attendants at information desks (and/or at reception desks) should be aware of the need to speak slowly and distinctly, and to look the visitor directly in the face while being careful not to cover the mouth; attendants also should have note pads handy
- self-help and other public telephones fitted with the necessary fluxcoil (a relatively simple conversion) that makes them usable by means of the "T" switch on most hearing aids
- avoidance of hard, sound-reflecting, surfaces in the immediate surroundings of an information or reception desk; select non-reflecting acoustical materials
- avoidance of acoustic masking interference from noisy lighting fixtures, ballasts, etc
- lighting should not throw shadows onto the attendant's face, causing problems for lip-readers.

E.4 Speech-Impaired Visitor Needs

- a pad and pencil at the information (and/or reception) desk
- an understanding attendant, Commissionaire, or receptionist
- a familiarity with Blissymbols used by many of the speech impaired to communicate and ask questions.

E.5 Learning-Disabled, Developmentally-Impaired and Situationally-Impaired Visitor Needs

- good common sense and understanding from the attendant, commissionaire or receptionist
- some training of the above staff in dealing with these problems
- redundancy which involves saying things in different ways until the visitor acknowledges he or she understands
- plain language in signs, simple words, and as few of them as possible
- consistency in the display of signs
- self-help telephones.

E.6 Mobility-Impaired Visitor Needs

- letters that are a minimum of 22 mm high everywhere so they don't have to cover more ground than necessary to see what a sign says
- ability of persons in wheelchairs to get relatively close to the signs without barriers between them and the signs
- consistency of display of signs
- signing of accessible routes

- physical access for everyone to maps, directories, and information services
- avoidance of glare off all signage elements.

E.7 Barrier-Free Design Standard (BFDS)

This document developed by Public Works Canada is an important reference work (of which mention is made throughout the *Guide*) covering the whole subject of access to and use of buildings by physically-disabled people.

It is primarily a technical standard for application to new and existing buildings. Departments having control and authority for real property should be consulted for application to specific buildings.

The standard describes a level of access for a broad range of users including: people who use wheelchairs for mobility, persons with reduced hearing or seeing ability, persons with reduced stamina, strength, dexterity and speed such as elderly people, ambulance attendants using stretchers, and able-bodied people. Access is provided so that public services and employee areas are accessible and safely usable to ensure equal access to employment opportunities. Design requirements and operational procedures related to life safety and building exists are also included.

This document is organized into three sections. The first part deals briefly with guidelines for the application of the standard. These are followed by technical design requirements outlining how areas and components are to be designed if they are provided in a facility. Appendices are included to provide additional information.

Keywords: Barrier-Free Design, Buildings, Disabled, Handicapped, Offices, Accessibility.

Copies are available on request from:

Documentation Centre
Architectural and Engineering Services
Public Works Canada
Sir Charles Tupper Building
Riverside Drive
Ottawa, Canada
K1A 0M2

Reference:

Cat. No. W31-40/1985
ISBN 0-662-53657-6
Public Works Canada

E.8 Summing Up




It is worth bearing in mind that some of your visitors will have multiple handicaps. A deaf person may also use a wheelchair, for example. This stresses the importance of your environmental communications system in being able to accommodate itself to the wayfinding needs of the disabled people, as well as to those of the able-bodied.

When we think of information in a public building we tend to think of something highly complex and involved. This may be because of all the different sorts of questions people ask, or the ways in which buildings differ from each other and so on.

But in actual fact, it is not complex at all. There are no more than three types of information that anyone in a public building requires. These information types are focused on in Appendix F.

Appendix F. The Three Basic Environmental Information Types

Everything that can be imparted in a setting (or that a person could want to know) falls into one of three types of environmental information: general information about the setting, directions to destinations, or identification of destinations.

Information Type	Description	Examples (locations)
	<ul style="list-style-type: none">Information about the setting showing where destinations lie; orientation of visitor to location in the settingNames of tenantsHours of serviceDo's and don'tsWarnings	<ul style="list-style-type: none">Maps, exploded views, plans (at entrance points)Building directory (beside maps)Signs (beside doors)Regulatory signs (as appropriate)
	<ul style="list-style-type: none">Information to guide visitor to destination	<ul style="list-style-type: none">Directional signs (at decision points)Attendants (at information desks)Self-help telephones (at entrances and/or decision points)Reference points (architectural and other features)
	<ul style="list-style-type: none">Information to confirm to visitor that he has arrived at destination	<ul style="list-style-type: none">Identification signs(as appropriate)Objects themselves do not need signs (if recognizable and nameable)

Appendix G. Message Schedules (Sample)

Page _____ of _____

Message schedule for

☐ identification signs ☐ directional signs ☐ general information signs

at

sign no.		message in U & lc (pictos)		lettersize
Total No. of signs this page	← if appl.	max no. of characters = 30 @ 22 mm cap ht 20 @ 40 mm cap ht	→ if appl.	22 or 40 mm cap height

Appendix H. Useful References

Public Works Canada Documents

Barrier-Free Design: Access to and use of buildings by physically disabled people (1985) (also known as the BFDS: See Appendix E.7)

Orientation and Wayfinding in Public Buildings: An Overview (October 1988)
AES/SAG 1-4: 88-17

Orientation and Wayfinding in Public Buildings: A Design Guideline (July 1987)
AES/SAG 1-4: 87-2

Treasury Board of Canada Secretariat

Federal Identity Program (FIP) Manual

Canadian Standards Association (CSA)

B651 Barrier Free Design Standard

SAMPLE
BUILDING
PLAN

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SIGNS REQUIRED ON THE CONCOURSE (00) LEVEL

